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Chemotherapy in Tuberculosis

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Effective chemotherapy is a relatively new field in the treatment of tuberculosis and one in which all practitioners of medicine should take more than passing interest, for the time has about come when it would seem practical for the family physician and general practitioner to assume responsibility for certain phases of the treatment of tuberculosis formerly only undertaken in hospitals —primarily chemotherapy.

In the over half-century period between Koch's discovery of the tubercle bacillus and its identification as the cause of tuberculosis in 1882, and the discovery of streptomycin by Waksman and his co-workers in 1944, the many attempts to find a specific drug had produced only failures and disappointments. Really effective chemotherapy might be said to date from the discovery of streptomycin just 10 years ago. Streptomycin was costly and difficult to produce in quantity, so that it was not until 1946 and 1947 that controlled studies in sufficient numbers were done, mostly by the Veterans Administration, Army and Navy hospitals, to definitely demonstrate the usefulness of streptomycin in human tuberculosis.[1]

While demonstrating definitely the suppressive effect of streptomycin, these early studies also brought out two major obstacles to chemotherapy—toxicity and the phenomena of bacterial resistance. In its first employed dosage of 1 to 3 grams daily in divided doses the toxicity of streptomycin was of major proportion. It also soon became apparent that bacilli remaining viable after 6 to 8 weeks exposure to the drug, became resistant to further suppression by streptomycin. Fortunately, during the next several years—1947 to 1949—studies directed toward the trial of new dosage schedules and with the concomitant use of para-aminosalicylic acid led to two rather surprising discoveries—one, that PAS, an anti-tuberculosis drug of very low order in itself, interfered with the metabolism of the tubercle bacilli in such a manner as to inhibit or even prevent the emergence of resistance to the action of streptomycin given concurrently—And two, that treatment regimens employing streptomycin dosage of 1 gram 2 to 3 times weekly, were as effective as the daily dosage, with the obvious advantage in relief of toxic reactions. Thus in 1950 the combined use of intermittent streptomycin with daily dosage of PAS had become the standard chemotherapy of tuberculosis. This allowed the prolongation of effective chemotherapy, a feature so necessary because of the nature of tuberculosis with so many necrotic lesions requiring prolonged bacterial suppression before healing can take place. Even with this prolongation of treatment, chemotherapy was still considered primarily an adjunctive measure, and rest, collapse measures, and surgical treatment were applied with little modification from their indications prior to chemotherapy.

I am sure you will recall how, early in 1952, the isonicotinic acid hydrazide derivatives were heralded by the newspapers in typical extravaganza style. If it did not live up to its first notices, studies were soon forthcoming to indicate that we had in Isoniazid a drug of potent anti-tuberculosis activity of about the same order as streptomycin.[2] But the old phenomenon of bacterial resistance was soon found to be evident in patients treated with

Isoniazid alone, perhaps developing more rapidly with this drug than with streptomycin. However, there are indications that with Isoniazid the development of resistance is associated with a decreased virulence of the tubercle bacillus. This was suggested by the fact that patients seemed to maintain the progress made by treatment with Isoniazid after resistance had developed, with the absence of relapse so commonly seen after continuing streptomycin treatment when resistance to that drug had developed. Some investigators even reported that Isoniazid resistant organisims isolated from treated patients were avirulent for the sensitive guinea pig. However, these findings are not uniform and other investigators have failed to confirm them. Until more is learned of this phenomena it is best to disregard it clinically, and since combining Isoniazid with PAS or streptomycin also prevents emergence of resistance, every effort should be made to prevent the development of Isoniazid resistant organisms. For this reason then it is generally accepted that Isoniazid is best not used alone.[3]

Comparative studies on the effectiveness of combined streptomycin plus PAS, with streptomycin plus Isoniazid, show about equal effectiveness of these two regimens, the Veterans Administration investigators indicating no difference and showing some preference for the streptomycin—PAS perhaps because of proven experience with it, while other investigators felt that there was a slight but consistent, if not a significant advantage in the streptomycin-Isoniazid regime. Early results also indicate that the combination of daily dosage of PAS and Isoniazid is as effective as either of these regimens with the obvious advantage of avoiding parenteral administration, but more time is needed to clearly establish these preliminary reports. Regardless of the results of sensitivity studies, there is much evidence that re-treatment—that is, a second course of treatment, is less effective than initial treatments, and in a disease with the relapsing characteristics of tuberculosis, there is an obvious advantage in not compromising the effect of the really two potent drugs—streptomycin and Isoniazid—by giving them simultaneously if it can be avoided without sacrificing therapeutic results. There are many other factors however, which enter into the decision as to the combination of choice—PAS intolerence being a most common one. As mentioned earlier, the order of anti-tuberculosis activity of PAS being low, high dosage levels are necessary, from 8 to 12 grams daily. As might be expected with oral intake of such order, local irritative manifestations are common—lack of appetite, nausea, vomiting, and diarrhea. These toxic symptoms, though never serious in themselves, are quite disadvantageous when the importance of proper nutrition in tuberculosis is considered. Isoniazid on the other hand is effective in quite low concentration and in its effective dosage range of from 150 to 300 milligrams daily is readily absorbed from the gastro-intestinal tract, making it a rather ideal drug for oral administration. However, the toxic potentialities of Isoniazid are certainly more numerous and of a more serious nature, with the central nervous system being most frequently involved. Such symptoms as restlessness, headache, insomnia, muscle twitching, and hyperreflexia, are fairly common, while the more serious developments such as difficulty in urination, convulsive seizures, and major psychoses, are usually predicated on some preexistent factors. The depression of hemoglobin is common, and rarely agranulocytic reactions and liver damage with jaundice have occurred.

The optimum duration of chemotherapy is at present still undergoing investigation, but it is already apparent that despite the appearance of maximum resolution and dramatic effects of chemotherapy in the early stages of treatment (from 2 to 4 months), beneficial results continue through prolonged treatment for as long as 12 to 18 months. There is also general agreement that treatment should be continuous and uninterrupted with no rest periods or short courses of therapy. The dramatic changes in the early months of chemotherapy are due to the regression of acute exudative disease, the reversible inflammatory portion, but there remains the residual necrotic, caseous and frequently cavitary lesions. With the prolongation of combined chemotherapy it is now well documented that even these lesions also respond

by cavity closure or filling in and contracture and walling off of necrotic and caseous areas. Further, the bacteriologic investigation of these necrotic lesions after surgical resection following prolonged chemotherapy has failed to reveal viable organisms in a high percentage of cases. These hitherto unexpected results of prolonged treatment marked another milestone and justify the supposition that chemotherapy may well become definitive treatment in many cases.

The institution of prolonged combined regimens has invalidated the former importance of timing chemotherapy with collapse measures and other surgical procedures.[3] This has made it practical to begin chemotherapy on patients when the diagnosis of tuberculosis has been established and not wait until a bed is available in the hospital, often after marked progression of the disease has taken place. In November of 1952, with a long waiting list and time lag of from 4 to 6 months between diagnosis and admission, we began the program of out-patient chemotherapy in the Chest Clinic. Even with Isoniazid alone with the first selective cases the results were most gratifying. The following case reports will best illustrate this:—

Case 1 (*A.D.*) Colored female diagnosed tuberculosis with positive sputum October 1952. Disease progressed markedly during following month. Patient remained in bed at home as no bed available in hospital. Chemotherapy, consisting of Isoniazid 200 milli-

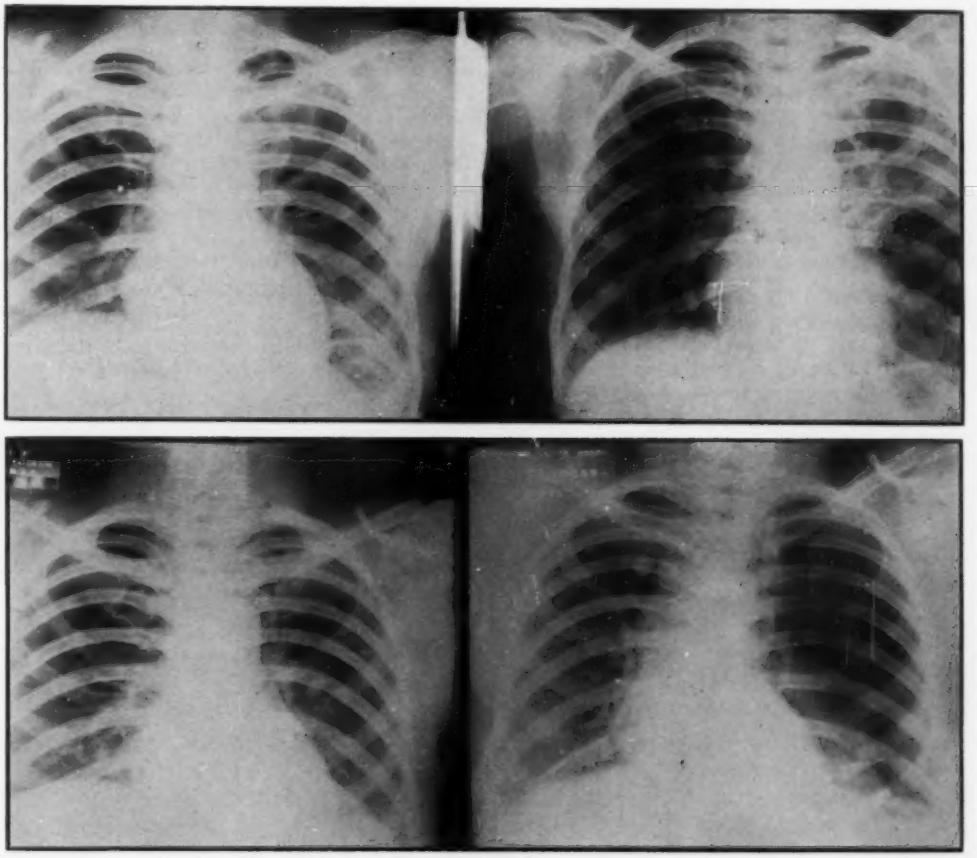

Figure 1

Case 1 (*A.D.*) *P-A Chest Films. Top Left: October 1952 at time of diagnosis—left upper lobe lesion—positive sputum. Top Right: November 1952—marked spread of disease 1 month later while on bed rest at home. Bottom Left: March 1953 at time of admission to hospital showing marked improvement on 4 months chemotherapy at home. Sputum negative. Bottom Right: October 1953 at time of discharge from hospital showing effective pneumothorax.*

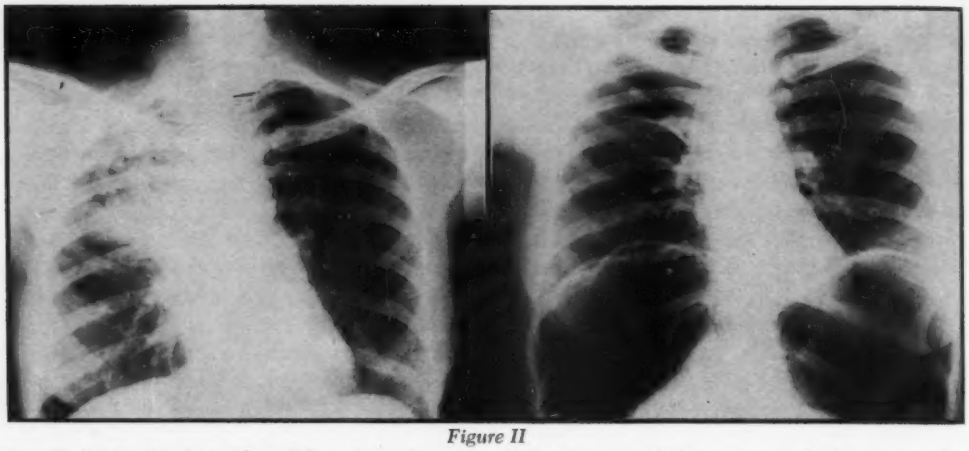

Figure II

Case II (M.McM.) P-A Chest Films. Left: January 1953 at time of diagnosis—positive sputum. Right: January 1954 at time of discharge from hospital, showing resolution of disease with chemotherapy and effective therapeutic pneumoperitoneum.

grams daily, begun in November 1952 with patient remaining at home. There was prompt subsidence of all symptoms and multiple sputum smears were negative in January and February 1953. Admitted to hospital March 1953 with negative sputum smears and cultures. Pneumothorax induced within two weeks after admission. Patient discharged October 1953. Total period of chemotherapy 12 months. Hospitalization only 7 months. (Fig. I)

Case II (M. McC.) Colored female diagnosed tuberculosis in January 1953 with positive sputum. As no bed was available in hospital was treated with Isoniazid—200 milligrams daily. Marked improvement followed with negative sputum smears by March 1953. Despite clinical well-being however, sputum cultures positive in May 1953. Admitted to hospital July 1953 with positive sputum smears. Streptomycin was begun in addition to Isoniazid after admission and pneumoperitoneum was induced in August 1953. Sputum converted negative again by November 1953. Discharged inactive January 1954. Total period of hospitalization only 6 months. Chemotherapy for 1 year at time of discharge is being continued as well as pneumoperitoneum sustained as out-patient. (Fig. II)

Beyond the objective of reduction of morbidity and even mortality, this program would seem to more than justify itself from a public health standpoint in the early conversion of sputum and the ultimate shorter hospitalization period needed.

In applying prolonged combined treatment to the already hospitalized patient, we are

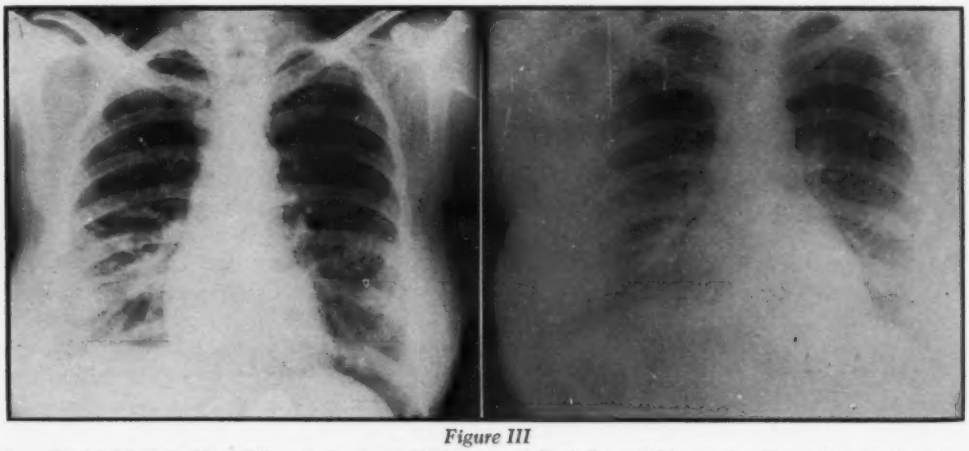

Figure III

Case III (A.J.) P-A Chest Films. Left: April 1953 at time of diagnosis showing miliary tubercles throughout both lung fields. Right: November 1953 at time of discharge from hospital showing resolution of miliary tubercles.

often faced with the dilemma of retaining in the hospital an apparently well person with stable lesion, non-contagious, and on full exercise, while the waiting list of the acutely ill mounts. Recently to solve this dilemma, we have allowed patients with adequate home facilities to leave the hospital and continue their chemotherapy and modified rest at home. The following Case Report illustrates this:—

Case III (*A. J.*) White female. Hospitalized March 1946 until January 1947 with pleurisy with effusion. Ten months bed rest only. In August 1952 admitted to a general hospital and had right nephrectomy—tuberculous kidney. Had a short course of chemotherapy when tuberculous etiology of this renal disease was revealed. In April 1953 during a routine follow-up examination found to have miliary hematogeneous pulmonary tuberculosis. Was hospitalized promptly. Chemotherapy consisting of streptomycin and Isoniazid begun. With exception of a quite stormy course in first few weeks of treatment patient was completely asymptomatic during hospital stay. Was discharged November 1953 after 8 months. Chemotherapy is indicated for at least 18 months and will be continued while patient remains at home. (Fig. III)

It is in this phase of the treatment of tuberculosis, and perhaps the prompt institution of treatment prior to hospitalization (until there are no longer waiting lists), that the time has come for the family physician and general practitioner to take part.

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Premature Mortality of Roper Hospital

(PERIOD: 1952-1953)

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A study has been made of clinical records regarding the immediate outcome of premature infants born at Roper Hospital during the two year period of January 1, 1952, through December 31, 1953. Such a survey has the purpose of serving as a stimulus for reassessment of the routines and techniques employed in the management of premature infants.

The following definition of prematurity, as set forth by the American Academy of Pediatrics in 1935, is still generally used and has been our criterion:[11] "A premature infant is one who weighs 2,500 gm. or less at birth (not at admission) regardless of the period of gestation.

"All live-born premature infants should be included, evidence of life being heart beating or breathing."

Analysis has been made of the following aspects of these cases: (1) incidence of prematurity among white and colored hospital births, (2) mortality rates by standard weight grouping, and (3) time and causes of death.

CLINICAL MATERIAL

All liveborn infants delivered at Roper Hospital in the years 1952 and 1953, weighing five pounds eight ounces (2,500 gm) or less, are included in this study, whether they lived only a few minutes or through the time of discharge. Any death occurring after discharge from the nursery is not considered here.

There were 4,741 live births, 369 of which were premature live births, the latter comprising the material used for the study. This group is made up of white and colored, private and service cases, with the colored infants far surpassing the white in number (ratio of 2.9:1). Those transferred from home, or from other hospitals, to this hospital for premature care are not included in this appraisal.

For study of the causes of death, only autopsied cases are considered; autopsy rate was 84.78%. When a clinical impression, only,

was recorded as the cause of death, the death was simply counted in the "no autopsy" category. The cause of death for each infant in our study was accepted in the light of the combination autopsy and clinical impressions.

RESULTS

An overall incidence of prematurity of 7.78% was found (see table I), with the unusually high incidence of 9.92% in the colored infants. Only 93 of 369 prematures were white, giving an incidence of 4.74%. There were more white infants in the higher weight groups; 82.8% had a birth weight of 1501 gm. (3 pounds 4 ounces) or more; 78.9% of the Negro infants were in the higher weight group.

There was an overall sex incidence of 50.6% females, and 49.4% males. Of the 93 white prematures, 49 (53.6%) were females; of the 276 colored prematures, 138 (50.0%) were females.

The overall fatality rate was 24.9% (25.8% for white and 24.6% for colored prematures), since a total of 92 of the 369 prematures died (see table II). Survival was poorest among the lower weight groups (see table II and III), there being a fairly large number of "1000 gm. or less" infants, those named by some authors as the "nonviable" or "previable" group[6, 13, 17].

Immaturity, birth injury, and infection, in that order of frequency, were the most significant causes of death in our series of cases (see table IV). The term "immaturity", includes incomplete development to the extent of probable incompatibility with extrauterine existence. It also includes failure of expansion of the lungs and anoxia due to the latter condition. Intracranial hemorrhage is included with birth injury because in several cases, it was impossible to determine at autopsy, whether hemorrhage was due to birth trauma or to a localized manifestation of hemorrhagic disease of the newborn. Congenital anomaly was given as the cause of death only in cases where the defect was severe enough to be incompatible with life. Infection is represented by cases of bacterial meningitis, pneumonia (of probable bacterial etiology), and one case of bacteremia. Next in order of frequency of occurrence was aspiration.

For the most part, deaths due to immaturity and birth injury occurred within the first 24 hours following delivery. All deaths due to infection took place after age 48 hours.

DISCUSSION

The overall incidence of prematurity at Roper Hospital, 7.78%, compares unfavorably with the national average of approximately 5% in 1944,[7] and 6.1% in 1946 (a figure obtained after compilation of statistics from 193 hospitals in the United States, the information concerning the year 1946 for the most part).[1]

Our high incidence might be explained by two major factors, one being the heavy service patient load; therefore, most of the mothers were of the lower socio-economic bracket in which prematurity always occurs more frequently.[2,6,7,13] The second major factor is that Negro prematures in our group of cases out-number white prematures by a ratio of 2.9:1. It has been shown in numerous previous studies[4,7,15] that there is a higher incidence of prematurity in the Negro race, a higher incidence of low birth weight and also, that mortality rates are higher among Negro prematures. This study shows that the 1952 and 1953 mortality rate for colored prematures at Roper was 24.6%, which is better than the white mortality rate, which was 25.8%.

The well-founded adage of premature survival being commensurate with birth weight, varying directly, is borne out by our statistics (see table III). By comparison with estimates of survival percentages established by the Children's Bureau (1948), our premature salvage is seen to be disappointingly small, as is the experience in other parts of the country.

EXPECTED PREMATURE SURVIVAL

Wt. in Grams	Roper's Percentage	Children's Bureau Estimate (%), 1948
0 - 1000	5.6	0
1001 - 1500	47.4	50
1501 - 2000	72.0	82
2001 - 2500	95.4	93

Our principal causes of death other than prematurity itself, were intracranial hemorrhage (which indicates a need of more thoughtful conduct of labor and delivery when a premature is expected), and infection (which serves as a vote in favor of more liberal

use of prophylactic antibiotics, since only two of those dying of infection had received antibiotics).

The subject of conduct of labor, in cases where prematurity is anticipated, has received much scrutiny and investigative work[7, 8, 9, 15, 16 & 18]. The following obstetrical principles have proved themselves worthwhile in lowering premature mortality:

Avoidance of precipitate first stage of labor
Minimal if any analgesia
Conduction anesthesia
Generous episiotomy
Outlet forceps

Forty-seven (51.0%) of the 92 premature deaths occurred within the first 24 hours following birth; this suggests that pre- and intranatal factors are still to be surmounted. Prevention of prematurity is the desirable objective, and throughout the country, educational and prenatal care programs with this in mind have been increasingly effective.[6]

Because infection was the outstanding cause of death among prematures living beyond 48 hours and because these are theoretically preventable deaths, the need for prophylactic antibiotic therapy (where indicated) is brought vividly to mind. However, two of the infants who died of pneumonia, presumably bacterial, had been given an oral broad spectrum antibiotic prophylactically. As one British author has said,[5] by the time of autopsy, it is sometimes difficult "to pick the cause of death out of the effects of dying". In these cases, bacterial invasion of the respiratory tree could well have occurred terminally, the fundamental cause of death remaining obscure.

The service patients delivered at Roper Hospital with a birth weight of five pounds (2270 gm.) or more, are placed in the full term nurseries, while those weighing less are cared for in the premature nurseries. Gordon-Armstrong Incubators and Isolettes* are used, the latter being employed for the smallest prematures. Ideally, provision is made for immediate removal of mucus, maintenance of body temperature, oxygen administration, and additional measures as indicated. Oxygen, humidity and wetting agent (either Alevaire** or 0.05% sodium lauryl sulfate with 3% glycerine solution) are supplied in the form of mist, via Vapojette* attachment to the Isolettes, or else generated in a deVilbiss No. 40 nebulizer by an oxygen flow of eight liters per minute. The Rockette* resuscitator has also been used for a short period of time with some success.

Oral feedings are administered cautiously according to the usual schedules for prematures, gavage feedings by polyethylene tubing are used rather effectively in the smaller prematures (all service cases and some private cases). The method of administration of feedings is decided by the size and condition of each individual patient, and feedings are supplemented as needed with parenteral fluid therapy.

Antibiotics are given those prematures who had any type respiratory difficulty at the time of birth, those delivered by Cesarian section, those delivered under circumstances considered for some reason to be "contaminated", and very small prematures.

As stressed repeatedly by authorities in the field of premature care, interested and trained nursing personnel constitutes a tremendous asset to any premature nursery. Unfortunately, nurses working in our nurseries have received no special training in the handling of prematures. Student nurses without previous pediatric or nursery experience are sometimes left in charge of the colored nursery because of the shortage of nurses. Another disadvantage is that the nursing staff appears to be changing constantly. It is possible that closer observation may have prevented some of the deaths due to aspiration.

The compiling of data such as these statistics, leads to critical self-examination which is desirable if steps can follow to correct or minimize our deficits. Further, the need for accurate premature records and carefully carried out autopsies on prematures is made more evident by such statistical analysis.

Dunham[6, 7] points out the importance of "comparisons between hospitals and between periods", with uinformity of statistics recording. A form for recording information on prematures has been suggested, as well as the following three point plan:

*Made by Air-Shields, Inc., Hatboro, Pa.
**Made by Winthrop-Stearnes.

1. "Include in statistics all live-born infants weighing 2,500 gm. (5 lb. 8 oz.) or less, regardless of gestation period. No exclusions should be made on the basis of "nonviability". Arbitrary exclusions should not be made on the basis of low birth weight or birth length, gestation period or duration of life.

2. "Compile data for the total number of premature infants who are born alive and the total who die according to the birth-weight groups recommended in the resolution adopted by the American Academy of Pediatrics.

3. "Compile data (A) for infants born in the hospital separately from those admitted to the hospital after birth; (B) by race—white, Negro, other—for the totals and the birth-weight groups."

The data in table V, obtained from various references, yielded a comparison for our statistics on incidence and mortality rates of prematures. It should be noted that some studies consisted of private patients only, or "white infants only", and therefore, cannot be used unreservedly for purposes of comparison. It is believed that Roper Hospital premature statistics are unusually good, considering the not altogether favorable conditions under which prematures are managed.

SUMMARY

The incidence of prematurity at Roper Hospital during the period 1952-1953 was found to be 7.78% (white, 4.74% and colored, 9.92%). The overall mortality rate of premature infants was 24.9%; broken down into the standard weight groups, our mortality figures are seen to be comparable with those found in other parts of the country. The causes of death were chiefly immaturity, birth injury, and infection, in that order of frequency.

The problem of bettering our premature infant mortality statistics rests upon the following tripod: (1) prevention—therefore the realm of the obstetrician and public health department; (2) ready, immediate provision of optimal environmental conditions and management—the realm of the pediatrician; and (3), interested and trained round-the-clock observation and care—the realm of the nurse. Thus, teamwork and cooperative study will yield the most effective management of the problem of prematurity.

TABLE I

Incidence of Prematurity, Roper Hospital, 1952-1953

	White	Colored	Total
No. of Newborns (Live Births)	1,961	2,780	4,741
No. of Premature Newborns (Live Births)	93	276	369
Incidence of Prematurity	4.74%	9.92%	7.78%

TABLE II

Premature Mortality Statistics, Roper Hospital 1952-1953

Birth Weight	Liveborn Prematures			Number of Deaths			Mortality Rate		
In Gms. & Lbs.	White	Col.	Total	White	Col.	Total	White	Col.	Total
1000 gm. or less (2 lb. 3 oz. or less)	8	28	36	8	26	34	100%	92.8%	94.4%
1001-1500 gm. (2 lb. 3 oz.— 3 lb. 4 oz.)	8	30	38	4	17	21	50.0%	56.6%	52.6%
1501-2000 gm. (3 lb. 4 oz.— 4 lb. 7 oz.)	23	77	100	7	21	28	30.4%	27.2%	28.0%
2001-2500 gm. (4 lb. 7 oz.— 5 lb. 8 oz.)	54	141	195	5	4	9	9.2%	3.5%	4.6%
TOTAL	93	276	369	24	68	92	25.8%	24.6%	24.9%

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TABLE III

Roper Premature Mortality by Birth Weight Groups

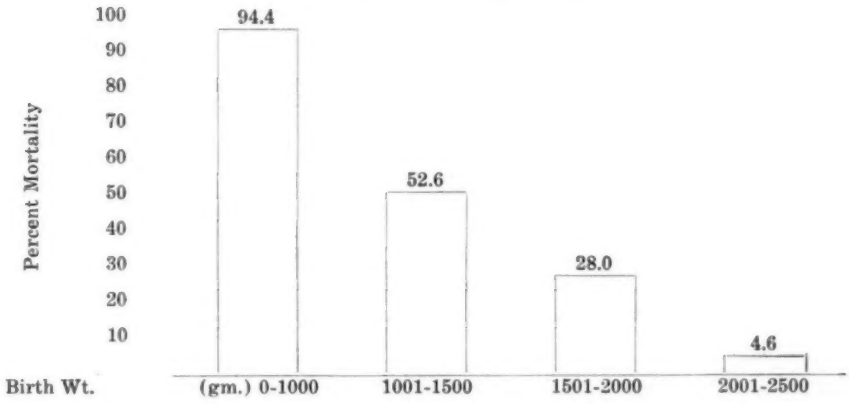

TABLE IV

Cause of Death by Age 1952-1953
(Autopsy Rate 84.78%)

Cause of Death	Under 24 Hrs.	24-48 Hrs.	Over 48 Hrs.	Total
Immaturity (including incomplete expansion of lungs)	24	6	6	36
Birth Injury (and intracranial hemorrhage)	10	2	2	14
Congenital Anomalies	2	2	1	5
Infection	0	0	12	12
Aspiration	0	1	6	7
Peptic Ulcer	0	0	1	1
Hyaline Membrane Dis.	0	1	1	2
Erythroblastosis	0	0	1	1
No Autopsy	11	1	2	14
TOTAL	47	13	32	92

TABLE V

Premature Statistics From Various Hospitals

Hospital	Years Covered	Incidence %	Mortality Rate %
Children's Bureau Estimate[1]	1946 mainly	6.1	21.5
Northwestern University Medical School[18]*	1941-1950	5.45	20
Philadelphia Lying-In[17]	1930-1944	9.4	38.5
Bridgeport (Conn.) Hospital[3]*	1947-1949	7.0	21
Geisinger Memorial (Danville, Pa.)[12]*	1938-1942	7.42	20.4
St. John's (Tulsa, Okla.)[13]*	1941-1950	6.8	22.4
Johns Hopkins University[8]	June 1926-1945	11.7	24.1
Walter Reed Army Hospital[14]	March '48-July '52	8.9	14
Roper Hospital	1952-1953	7.78	24.9

*Mostly private, white patients. The Bridgeport report includes infants with birth weight of 2270 Gm. (5 lbs.) or less only.

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Rambling With An Anesthesiologist Through Judicial Decisions of South Carolina

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It has been rather pleasant and entertaining to review in the past few weeks, at random, the reported judicial decisions of our South Carolina Courts pertaining to the medical profession in this State.

Apparently, the first officially reported opinion is to be found in Brevard's and in Treadway's Reports, of the Constitutional Court, held at Columbia, in November 1815, in the case of Dr. John Hughes vs. General Wade Hampton, 3 Brev. 544, 5 S. C. Law 261, and 2 Tread. Const. 745, 7 S. C. 74.

Dr. Hughes brought an action against General Hampton for the payment of a bill presented for medicines and medical attendance. The lower court found judgment for the physician. On appeal, the Court in granting a new trial, said:

"The charges were general ones for medicine and attendance. One item was '13 dollars for medicine and attendance on one of the General's daughters, in curing the whooping cough.' The new trial is asked, on the ground that the plaintiff ought to have given a specific bill of the medicine and attendance."

Thus the Court held that the charges were too general.

In the annals of the Constitutional Court, May 1818, in the case of Brown vs.. Mims, 2 Mills Const. 235 (9 S. C. Law 62), involving an action for slander, it appears that a Mr. Mims was discussing Dr. Brown with a lady and asked her in conversation what she thought of him. She replied that she thought very highly of Dr. Brown, that he had been very successful in his practice, and was much

esteemed in the district. Mims said that he thought "that he was damned rascal, and not fit to give medicine to a puppy, and that he should not give medicine to a sick puppy of his." Dr. Brown heard of the publication of what had been said, sued Mims and a jury awarded him a verdict of $200.

An appeal from the judgment was made on the ground that the words were not in themselves actionable, and there was nothing in the declaration from which it could be inferred that they related to the skill of his profession.

Justice David Johnson, delivering the opinion which affirmed the judgment of the lower court, said that the words spoken in the conversation were an imputation against the professional skill of Dr. Brown. That the words "he was damned rascal," although a vulgar expression, was, perhaps, the strongest in use, to convey our ideas of moral turpitude, and rebutted the lady's opinion of his good character; those which followed were, therefore, unnecessary to explain his meaning on that subject, and must have been intended to apply to his success in the practice of physic, and can mean nothing else than a want of skill.

One judge of Court dissented from the opinion; therefore, you are at liberty to draw your own conclusions of what he thought of Dr. Brown.

It is interesting to note in the dicta of the case that Judge Johnson says "every thinking man must rejoice that the Legislature, at their last session (1817), have adopted measures to regulate admission to practice physic. But, until now, reputation and merit were generally considered sufficient to entitle the possessor to the appellation of physician, and many, without any other badge of profession, have, and continue to be, ornaments to the profession, and country in which they live; and the health and life of the citizen has frequently been found more secure in their hands than in the hands of those who have no other claim to confidence than the bare possession of a diploma."

Thus we see that in 1817, 137 years ago, the State of South Carolina was interested in the welfare of her people, and was ready to extend protection of the law against those who would betray the ethics of the medical profession.

And in the Constitutional Court sitting at Charleston, in 1821, McBride vs. Watts, 1 McCord, 384 (12 S. C. Law 156), we learn that a Dr. McBride had attended and provided medicines for a mate on a ship while he was ill of a fever in the port of Charleston. Dr. McBride presented his bill for services and, before it was paid, he passed away. Thereafter, his widow, as executrix of his estate, brought action against the owner of the vessel for payment. Upon trial of the case, in support of the bills, Dr. McBride's original book of entries was produced and proved, and a witness testified that the physician had tendered the bill to Captain Watts, owner of the vessel, who had made no objection. The judgment in the lower court was for payment of bill.

The Judge ruled that the doctor's books of original entries was good evidence, both as to the medicine administered and of the person who engaged his services, upon authority that the Court had determined that the books of a shop keeper were prima facie evidence, both as to sale and delivery; and that the court had held an entry made by a servant of a tailor who had died was good evidence as to sale, although there was no proof as to delivery. That the Captain of the vessel was liable in that there was a tacit admission on his part that he had employed the doctor and, under the ancient marine law the captain was bound to provide everything necessary for the mate's recovery.

Here we see that the shop keeper and tailor have been of benefit to the medical profession in establishing that your records are good evidence, and that your nurse or assistant may make them for you, and which may be competent evidence. I may add that the Judge in the Brown case, supra, who said it was not slander to call a physician a "damned rascal," agreed that the late Dr. McBride was entitled to be paid for his services.

In 1847, a surgeon brought suit against a general practitioner, to collect his fee, Guerard vs. Jenkins, 1 Strob. 171 (32 S. C. L. 75). Dr. Jenkins was the retained physician for a plantation near Charleston. One of the slaves on the plantation became very ill and it was determined that a surgical operation was

necessary. Dr. Jenkins directed the overseer to send for Dr. Guerard, a surgeon of Charleston, who performed the operation, without any assistance from Dr. Jenkins. Dr. Guerard presented his bill to Dr. Jenkins, who refused to pay it, so he brought action to recover his fee of $50. The Judge of the lower court decreed that Dr. Jenkins should pay. He appealed on the grounds that there was no privy of contract between the two doctors, and that the services were rendered to the plantation.

The Court of Appeals, in sending the case back for a new trial, held that in an action on parole contract, it was necessary to aver that the consideration was performed at the special instance and request of Dr. Jenkins and he had derived no benefit from Dr. Guerard's professional services to the slave of the plantation owner, from which a previous request may be implied, nor did he promise to pay for them. That in order to charge Dr. Jenkins with an implied promise, it would be necessary to prove that the services were rendered at his request. He did not authorize the overseer to send for the plaintiff on his account or in his name, nor did he assume to pay for services. The case seems to imply from testimony given by a witness, who was a physician, that if a physician calls another in consultation, without the knowledge of the owner, "the usage would be to charge him who requested the consultation."

In referring to the slander case of Dr. Brown vs. Mims, supra, mention was made to the Court's comment in regard to the General Assembly taking action in 1817 to regulate the practice of medicine in South Carolina.

In 1859, we find the Act of 1817 playing an important part in the case of Crane vs. McLaw, 12 Rich. 129 (46 S. C. L. 43).

Dr. Crane, of Columbia, brought action against McLaw for the payment of a bill rendered for medicine and medical services. He proved the account from entries in his book, and stated he was a practicing physician. The defendant insisted that the doctor should produce his license to practice physic and surgery before he be allowed to prove his account, and moved for a non suit. The Judge overruled the motion and decreed judgment for the doctor.

The Court of Appeals, in dismissing the appeal before it, referred to the Act of 1817, the fourth section of which was to the effect that a physician had to be licensed under the laws of South Carolina to legally collect payment for his services. The Court observed that prior to 1817, he who employed a physician and accepted his services, prima facie, admitted his professional qualifications, and that the court had considered the Act of 1817, in Westmoreland vs. Bragg, 2 Hill 414, where an apothecary who had no license could not recover a debt for "vending liquids compounded of roots and vegetables according to the Thompsonian system."

The Court came to the conclusion that for a physician in South Carolina to collect a fee, he must be licensed, and that the person sued had a right to require production of such license, however, the person claiming that the physician had no license, must give reasonable notice by plea or otherwise that he produce it. There being no notice or plea in the cause, Dr. Crane recovered.

Now in 1882, in Barnwell County, Hyrne vs. Erwin, 23 S. C. 226, we find that a Mr. Hyrne brought an action against Dr. J. D. Erwin and Dr. C. W. Erwin, father and son, partners in the practice of medicine, to recover $5,000 for negligent and unskilful conduct in the setting and treatment of his arm.

Mr. Hyrne had his arm broken by the falling of his horse, and the physicians were called and both attended him. He alleged that there was negligence in setting his arm, in applying the bandages too tightly, failure of the doctors to give attention to him, when requested, and not returning for several days, and as a result he lost the use of his arm. There was a jury trial, with a verdict of $1,000 as damages. From the judgment, the physicians appealed to the Supreme Court on the charges of law given by the trial judge. The Court, in affirming the judgment, said in effect that partners in the practice of medicine are all liable for an injury to a patient resulting from the negligence, either of omission or commission, of any one of the partners within the scope of their partnership, but for an injury resulting from the act of one partner outside of the common business, the offending partner is alone responsible. This is based on the general doctrine

of agency and of relation of master and servant.

The higher Court found no error in the charge of the trial judge, in saying "that when two gentlemen associate themselves together in the practice of medicine or law, or any other scientific profession, each becomes surety for the other that he will faithfully and properly perform his engagements. And if either fail to display reasonable care, diligence and skill in the performance of his duties, both are liable."

The matter of regulating the practice of medicine is of great importance to State, welfare of the public, and physicians alike. In 1888 we find in the case of Robb vs. State Board of Medical Examiners, 6 S. E. 824, 28 S. C. 589, where a doctor sought to have the Board admit him to practice in this State, and was refused a license. A brief analysis is given of the different acts between 1817 (Brown vs. Mims — 2 Mills Const. 235 — slander case) and 1888 by Judge C. J. Simpson which reflect that,

From 1817 to 1829 physicians and surgeons could be licensed in this State by one of two boards (one at Charleston and the other at Columbia) either upon examination where the applicant had no diploma, or without examination, where he had a diploma.

From 1828 to 1833 a diploma was required, or an examination by the faculty of the Medical College of Charleston.

From 1833 to 1869 the trustees and faculty of the Medical College of the State could alone grant license, which it was authorized to do upon presentation of a diploma from some medical institution, or, in its absence, upon examination by and a recommendation from said faculty.

From 1869 to 1881 two full courses of instruction and graduation at some school of medicine, either in the United States or some foreign country, or a certificate from some state medical society.

From 1881 to 1887, all physicians and surgeons were required to register in the Clerk of Court's office in the County in which he practiced.

In 1887 the "State Board of Medical Examiners" was created, vested with power to examine such persons if deemed necessary; license to grant or not as the board may determine.

In 1902, Moore vs. Napier, 42 S. E. 997, 64 S. C. 564, a student was graduated and received a diploma from the South Carolina Medical College, having studied the course for three (3) years. When he matriculated, the course of study established for graduation was only three years; but while at the institution a four-year course was inaugurated, commencing with the collegiate year of 1901.

Under the statutory law of the State, while this young man was attending the Medical College, it was provided that those who desired to practice medicine in the State were to present certain data, credentials and qualifications to the State Board of Medical Examiners and, upon passing an examination given by the Board, a license was granted. On February 15, 1901, the law was amended so as to provide that the section was not applicable to a regular graduate, holding a diploma issued by any medical college of the State, which had a four year course.

When the young and enterprising student received his diploma, he immediately made application to the State Board of Medical Examiners and requested his license, contending that he had received a diploma from the South Carolina Medical College and was entitled to his license. The Board turned him down. He then made application for a writ of mandamus to the Supreme Court to Order the Board to give him his license.

The Court sustained the Board, and held that the young man was not entitled to a certificate to practice without an examination.

There are many other cases involving the authority of the State Board of Medical Examiners and the regulation of the "practice of medicine" in South Carolina, (Hollis vs. Board, 64 S. E. 232, 82 S. C. 230; Harris vs. Sims et al., State Board of Dental Examiners, 109 S. E. 411, 118 S. C. 1; State vs. Barnes, 112 S. E. 62, 119 S. C. 213—Chiropractor; State vs. Deadwyler, 130 S. E. 332, 133 S. C. 75—Chiropractor; Ex Parte Oliver, 134 S. E. 657—not reported in State Reports; Gregory vs. McInnis, 134 S. E. 527, 140 S. C. 52—defines malpractice as to veterinarian; Ezell vs. Ritholz,

198 S. E. 419, 188 S. C. 39— optometry; South Carolina State Board of Dental Examiners vs. Breeland, 38 S. E. 2d 644, 208 S. C. 469, 167 A. L. R. 221; Lake vs. Mercer, 58 S. E. 2d 336, 216 S. C. 391—chiropractor; Jacoby vs. South Carolina State Board of Naturopathic Examiners, 64 S. E. 2d 138, 219 S. C. 66; Williams vs. Capital Life and Health Ins. Co., 41 S. E. 2d 208, 209 S. C. 512—an osteopath, a homeopath, a chiropractor, a magnetic healer and a naturopath are alike, practitioners of medicine)

A leading case in this State involving malpractice is that of Dillishaw vs. Bell, 105 S. E. 410, 115 S. C. 258, from McCormick County, in 1920.

Mrs. Dillishaw was the mother of several children, and, on October 26, 1917, she arose to attend to the wants of one of them. In some way she fell to the floor and injured her knee. Dr. Bell was called to attend her. He came, made an examination and found the knee was too painful to make a thorough examination and, not having brought an anaesthetic with him, went away to get it. He returned the same night with Dr. Mattison to assist him. When these two doctors had made an examination, they agreed that the injury was the result of a torn muscle and not a broken kneecap or patella. The physicians bound up the knee with a bandage known as a "figure 8" bandage. The knee did not get well and Mrs. Dillishaw called in Dr. Fuller, whose diagnosis was a broken patella. Dr. Fuller called to his assistance Dr. Neel, who was doubtful as to the diagnosis. An x-ray was taken, and it confirmed the diagnosis of Dr. Fuller. Months later, Dr. Fuller and Dr. Neel performed a surgical operation on the knee which was successful. Dr. Bell quit the case when Dr. Fuller was called.

Mrs. Dillishaw brought action against Dr. Bell for negligent treatment, alleging three specifications of negligence, to wit: Negligence in making the diagnosis, negligence in the treatment, and negligence in a premature discharge of the plaintiff as cured. The jury returned a verdict in her favor. The doctor appealed from the judgment to the Supreme Court on the ground that a verdict should have been directed in his favor. That is, that the evidence presented did not show negligence on his part.

The Supreme Court, in reversing the judgment of lower Court, decreed that a verdict should have been directed for Dr. Bell.

The Court said,

As to Negligence in the Diagnosis;

"The strongest point in the plaintiff's (Mrs. Dillishaw) favor was the statement that there was an indentation on the knee that followed the break in the bone, and large enough to hold the finger. There was undisputed evidence, however, that a torn muscle would have produced the same depression. The evidence is all one-way—that an injured knee presents difficulties of diagnosis that mislead the most skilful physicians." That negligence in a diagnosis goes out of a case when it is the uncontradicated testimony that a mistake in the diagnosis of injury to a knee is liable to occur with the most skilful.

As to negligence in treatment;

"All the doctors said that the "figure 8" bandage was a well recognized method of treating this kind of injury, when the patella was broken. It may be better to operate, but even operations are not always successful. There is no evidence from which negligence in treatment can be inferred."

As to premature dismissal;

Dr. Bell said that he quit the case when he learned that Dr. Fuller had been called in, and that was the practice. And the Court held that there was insufficient evidence to submit to the jury as to whether Dr. Bell prematurely dismissed the case.

Digressing from our State decisions for a moment, it is needless to say that a physician abhors the word "malpractice," which is defined in 70 C. J. S. 175 as being bad or unskilful practice on the part of a physician or surgeon resulting in injury to his patient. For a moment we shall discuss generally the duty and liability of an anaesthesiologist toward a patient.

It is the duty of an attending physician or surgeon to use reasonable skill and care for the safety and well-being of his patients. In the absence of any statute, the common law holds every physician or surgeon answerable for an injury to his patient resulting from want

of the requisite knowledge and skill or the omission to use reasonable care and diligence, or the failure to exercise his best judgment. 41 Am. Jur. 198.

The duty of a physician or surgeon to bring skill and care to the amelioration of the condition of his patient does not arise from contract, but has its foundation in public considerations which are inseparable from the nature and exercise of his calling. It is predicated by the law on the relation which exists between physician and patient. Nat'l San vs. Ward, 100 U. S. 195, 25 L. Ed. 621.

Perhaps you will say that when rendering medical aid the patient should give full cooperation, and he should, as it is the duty of the patient to submit to the treatment prescribed by his physician and follow directions given by him. If the patient fails to do so and thereby enhances or aggravates the injury, the rule seems to be universal that such disobedience will prevent a recovery in a malpractice action. Jenkins vs. Charleston General Hospital & Training School, 90 W. Va. 230, 110 S. E. 560. This is known as contributory negligence or assumption of risk on the part of the patient.

A physician must possess that reasonable degree of learning, skill and experience which ordinarily is possessed by others of his profession under similar circumstances. It does not exact the utmost degree of care and skill attainable or known to the profession. His conduct is subjected to a test by a reasonable external standard. 41 Am. Jur. 201.

Likewise, it is the accepted rule that a physician who holds himself out to be a specialist is bound to bring to the discharge of his professional duties as a specialist that degree of skill, care and learning ordinarily possessed by specialists of a similar class, having regard to the existing state of knowledge in medicine in his special field, that is, a higher degree of skill, care, and learning than that of the average practitioner. If he holds himself out as such, he must bring to his patients that degree of skill which a specialist assumes to possess. 41 Am. Jur. 208.

The duty and liability of a physician in administering an anesthetic to a patient are substantially the same as those which govern him in treating a patient generally. That is, he is bound to exercise such reasonable care and skill in that behalf as is usually exercised by average physicians or surgeons of good standing in the community in which he practices. 41 Am. Jur. 212.

Under related decisions it would appear that an anesthesiologist, being a specialist, is charged with the duty of acting on his bona fide judgment and is not liable for injuries or death resulting without negligence, from honest errors of judgment. He is liable, however, if his mistake of judgment is so gross as to constitute negligence.

He may be liable if he fails to observe plain physical laws or physical facts which are governed by ordinary principles of intelligence. That is, if he persists in administering an anesthetic after a warning which would impel one of reasonable prudence to desist, he should be answerable for the consequences.

It has been held negligence for an anesthetist to administer a certain anesthetic without first advising himself by an examination as to the condition of the patient. 12 A. L. R. 1494.

The question may be promoted as to what is the liability of an anesthesiologist for the negligence of the operating surgeon.

A physician or surgeon must exercise due care in selecting his assistants, and on the simplest principles of law, agency, or of master and servant, a surgeon may be liable for the neglect or fault of his employee or servant, such as an assistant who is working under his direction for injury resulting therefrom to a patient.

Frankly, our Courts are divided as to the liability of an operating surgeon for the negligence of an anesthesiologist of his choice. Generally the rule of master and servant exists and the doctrine of respondent superior applies. Where the surgeon directs the anesthetist, he is responsible for his acts, for the surgeon is in control and the act of his assistant is the act of the surgeon. 60 A. L. R. 149.

It is reasonably safe to conclude from decisions of the Courts of other States that a surgeon is not liable for the negligence of an associate when he has no management or control over him, nor is an anesthesiologist, when

called in, for special service, liable for independent acts of negligence on the part of a surgeon.

We find in 70 C. J. S. 978 that "a physician who merely administers an anesthetic to a patient operated on is not liable for the negligence of the operating surgeon, and the operating surgeon is not liable for the negligence of the physician administering the anesthetic in his absence where each doctor has been employed to perform his separate work independently of the other."

There is in law an expression "proximate cause." Who or what caused the injury. This includes a multitude of things. There being no joint control, no joint or concurrent act, or control over each other's acts, the anesthesiologist stands on his own and the surgeon on his.

Now back to our South Carolina cases.

In 1924, Pittman vs. LeMaster, 121 S. E. 677, 128 S. C. 98, a physician in Cherokee County brought action against a husband for attending his wife in child birth. He claimed the amount was $150 based upon the theory of quantum meruit—that is, as much as he deserved.

There was no dispute between the parties as to the service rendered and it being satisfactory. The husband contended that he made a special contract covering the service, by which the physician was to be paid $35.00 plus mileage of $3.50, total $38.50. Upon this issue the jury rendered a verdict for the physician for $38.50.

An appeal was made involving the question of "burden of proof" where the plaintiff sues upon a quantum meruit and the defendant sets up a special contract.

The Supreme Court ordered a new trial, saying,

"Where plaintiff (physician) sues on a quantum meruit and proves the services and their value, he makes out a prima facie case upon the theory that an implied contract has been established to compensate him for their reasonable value."

and

"If the defendant (husband) relies upon a restrictive express contract fixing the amount of compensation, he must set it up as an affirmative defense, the burden of establishing which is upon him."

In another case, 134 S. E. 226, 136 S. C. 56, 48 ALR 243, we find an interior decorator bringing action against a physician for negligent treatment, alleging damages of $10,000.

The lady was residing in Columbia and was engaged in the business of interior decorating. In November 1922 she consulted a prominent physician of that city about removing two warts from the index finger of her right hand. X-ray treatments were given, and her finger was severely burned. The jury rendered verdict for the defendant (the physician).

The lady appealed to the Supreme Court imputing error in trial, one of the grounds being as to the admission of testimony of two physicians "as to the efficiency and carefulness of the doctor and as to his reputation."

The Court held that the testimony was inadmissible on the issue of negligence, therefore, the case was reversed and sent back for a new trial. It said, "a physician might even be so skillful or competent in a general way, or might have an unexcelled reputation, and yet be guilty of the grossest negligence in his treatment of a particular case. x x x This view is supported by the weight of authority." The physician was charged with negligence and not with incompetency. The matter of fitness was not in issue. The Court also said,

"The use of dangerous instrumentalities such as electricity, radium, etc., in the treatment of a disease, demands not only skill and competency, but the exercise of such care as may be necessary and required by reason of the inherent danger of the instrumentality employed."

In Smith vs. Baker, 172 S. E. 767, 172 S. C. 75, our Court in 1934, in a short opinion, setting forth none of the testimony, held that in an action for malpractice in performing an operation and treatment that if there were any competent testimony presented in trial to support allegations of negligence, carelessness and recklessness on the part of a surgeon, it should be presented to a jury for determination.

The question of a parent being responsible for medical bills of an adult child arose in 1938 in the case of Broadway vs. Jeffers, 194 S. E. 642, 185 S. C. 523, 114 ALR 1244.

In 1935, late in the afternoon, at St. George, one Willie Jeffers, an adult, was seriously and

critically wounded by a deputy sheriff of Dorchester County. He was immediately rushed to the Summerville Infirmary for medical and surgical treatment. On examination it was found that a pistol ball had entered his chest, ranged downward, slit his intestines and buried itself in the pelvis. His father was notified of the condition and he arrived at the infirmary about 10 P. M., conferred with physicians, surgeons and nurses.

After some months, young Jeffers recovered, and two physicians, two nurses, all of whom had rendered services, and the infirmary presented bills to the father for payment, and he refused to pay them .

All entered suit against him, the cases being tried in Orangeburg County. The plaintiffs testified that the father had said to "spare no expense." He denies that he had incurred the expense. The trial judge submitted the cases to a jury on question as to whether or not the father had made a contract for payment of the bills. The jury returned verdicts for the plaintiffs, and the father appealed to the Supreme Court.

One of the questions presented on appeal was whether or not the father was responsible for the payment of the bills for his adult child.

The Court, in affirming the judgments of the jury said, "As a general rule, a request by a parent to a surgeon or physician to attend an adult child does not create an implied contract to pay for the services rendered by the physician or surgeon. However, this is not a rule of invariable application, for the conditions and circumstances surrounding the parties at the time the request is made, as well as the utterances on the subject, must be taken into consideration, and if, under the facts and circumstances, the physician or surgeon is justified in believing and relying on the parent's intention to pay for the services rendered, although there is no express promise to pay therefor, an implied contract is created, making the parent liable for the reasonable value of the services rendered. Of course, if there is nothing in the facts and circumstances suggesting to the physician or surgeon that the parent intends to assume legal obligation to pay, at the time the request for services is made, the parent is no more legally liable for services rendered to his adult child, living away from his home than he would be for services requested to be rendered to a total stranger."

In Wadsworth vs. McRae Drug Co., 28 S. E. 2d 417, 203 S. C. 543 (1943), our Court, discussing the liability of a pharmacist for placing a solution in one's eye as engaged in "practice of medicine," specifically held "that a corporation may not engage in the practice of medicine even through licensed employees."

The decision was based upon Ezell vs. Ritholz, 198 S. E. 419, 188 S. C. 39, in which it was held that an optometrist could not act in the practice of his vocation as an agent of a corporation. In that case (1938) the Court, with the late Honorable L. D. Lide, Acting Associate Justice, writing the opinion, aptly said, "The ethics of any profession is based upon personal or individual responsibility. One who practices a profession is responsible directly to his patient or client. Hence he cannot act in the practice of his vocation as an agent of a corporation or business partnership whose interests in the very nature of the case are commercial in character."

Now we know that all of the beautiful homes and office buildings which you anesthesiologists own are fully paid for and you have no mortgages on them. However, if you should hear of any one of your associates who may have to borrow money and secure a loan by a mortgage, you may tell him that under the cases of Anderson vs. Purvis, 44 S. E. 2d 611, 211 S. C. 255 (1947), and 67 S. E. 2d 280, 220 S. C. 259 (1953), if foreclosure proceedings are instituted against him that he will be entitled to offset the reasonable value of professional services rendered by him to the mortgagee and other members of his family, in the nature of quantum merit.

It has been a pleasure to be with you in such an enjoyable atmosphere and, after your hearing me, may we never meet under an anesthetic.

ADDRESS MADE AT THE PRESENTATION OF A PLAQUE OF DR. WILLIAM ATMAR SMITH

REMARKS BY DR. LEON BANOV

Before beginning our scientific session, we will proceed with the unveiling of a bronze plaque recently presented to Pinehaven Sanatorium by the professional colleagues of Dr. William Atmar Smith, as an enduring token of affection and esteem.

The Committee who had charge of this auspicious ceremony has requested me to make the presentation speech; and I don't mind admitting that for very personal reasons, I am proud to be the spokesman for this occasion, and consider it an honor and a privilege that I shall long remember.

This plaque is being presented tonight as a tangible token of the esteem, love and affection which his professional colleagues bear towards him and is just another palpable testimonial to his warmth of character, his genial friendliness and his very able leadership.

Those of us who really know Billy Smith are not the least bit surprised that he has been recognized by his colleagues—our surprise perhaps is that he has not received such recognition before.

To give a complete history of Dr. Smith's medical career one would, at the same time, have to give a history of the progress of medicine in Charleston and in South Carolina during his lifetime, because he has had an active part in most of it.

I shall however, stress this evening his chief

medical interest,—his one true professional love—Pinehaven.

It seems but yesterday when after a great many years of wishing and hoping and talking and working on the part of a great many people including Dr. Smith, that a roughly constructed tuberculosis sanatorium was put together on the old Meeting Street Road, just a few miles north of the city limits, built out of old lumber and used equipment, the institution known as PINEHAVEN was dedicated to serve the public in the treatment and control of tuberculosis.

What that institution lacked in the way of facilities and equipment was more than made up by the enthusiasm displayed by its staff of workers; and for just about *thirty* years, Pinehaven has been rendering a service, comparable to many larger and wealthier institutions. The point I want to bring out is that usually a successful enterprise is found to be but the drawn out shadow of some outstanding personality who has consecrated the very best portion of his life in the building up of that institution; and in this, Pinehaven is no exception. The *man* that was most *responsible* for the medical success of Pinehaven—the man who through the alchemy of love, altruism and a zealous devotion to his duties, magically transformed a few rough walls and a roof into a real temple of healing, is the man that we are proud to be honoring this evening—Dr. Wm. Atmar Smith—a true physician—an able teacher—a real humanitarian, whose selfless devotion to his work and to his patients has brought him in very close touch with the heartthrobs of his followers, and it is not an accident or a coincidence that his patients in Pinehaven and elsewhere speak of him most affectionately as "Dr. Billy".

Most physicians—certainly the older men—those who have been practicing for a long time—are looked upon with a certain amount of reverence—almost akin to awe—but in the case of "Dr. Billy Smith", there is also to be found evidence of a deep love and an abiding affection for him on the part of his patients, that must itself prove of great therapeutic value to them.

In the beginning when Pinehaven first started, there were few tools with which to work. Fresh air—good food—rest—and an abiding faith in their institution, and in the physician who guided them back to health. As time went on, under Dr. Smith's leadership, Pinehaven adopted new methods of treatment one by one, as they were developed in various portions of the world, and he surrounded himself with men who, fired with his own zeal and enthusiasm, likewise showed a devotion to their work beyond their call of duty. The same personal attributes that assured the success of Pinehaven, and the unusually fine service that he rendered there, also brought Dr. Smith national recognition. For instance, he has served during a number of years as Representative Director of the National Tuberculosis Association, and he served three terms on the Executive Committee of that great organization. He has served as Vice-President of the American Trudeau Society and later became a member of the Executive Committee of that Society. He also served as Vice-President and later as President of the Southern Sanitorium Association and as President of the Southern Tuberculosis Conference.

Locally, he has served on the Board of Directors of the South Carolina Tuberculosis Sanitorium and on the Board of Commissioners of the Roper Hospital, and he was Chairman of the Charleston City Board of Health for quite a number of years. He is the Regional Consultant on Tuberculosis for the Veterans Administration. His colorful career also included a Captaincy in the Medical Corp of the U. S. Army during World War I. For a number of years, he served as the faithful Secretary of the Medical Society of South Carolina and he later became its President. He also served as President of the South Carolina Medical Association. At present he is Clinical Professor of Medicine at the Medical College of South Carolina and a Consultant at the Roper Hospital. His outstanding achievement however, is the fine medical service that he has built up in Pinehaven during the past thirty years, in the capacity of Medical Director.

This bronze plaque should serve as an enduring reminder of the unselfish service that Dr. Smith has rendered to his community, to Pinehaven and to the cause of tuberculosis control. The work that he has accomplished for Pinehaven should of itself serve as an unforgettable memento—for the reason that only because of this work, has the institution continued to live and to grow—and to develop as it has done. Together, may they ever serve as an enduring reminder of the great work accomplished by Dr. William Atmar Smith, Medical Director of Pinehaven Sanatorium, in combatting tuberculosis, and may his genial kindly presence be with us for many, many more years to come.

PRESENTATION OF DR. WILLIAM WESTON'S PORTRAIT TO THE MEDICAL COLLEGE OF SOUTH CAROLINA, FOUNDER'S DAY NOVEMBER 4, 1954

FRANK C. OWENS, M. D.

Place: Auditorium of the Medical College of South Carolina, Charleston.

Subject: Address being the presentation of a portrait by Charles Crowson of Dr. William Weston, to the Medical College of South Carolina by the medical colleagues of Dr. Weston.

The other day I read in the daily paper an article stating that the life expectancy of a baby born in 1900 was 49 years and one born today in 1954 was 72 years. This remarkable achievement is directly due to the work in prevention, diagnosis and treatment by the medical profession over that span of time. Every one of you doctors can proudly claim your share in adding those years to life. Perhaps, you individually added only a fraction of a second, but you did your part. Most of the added years were in the years of infancy and childhood. Those who dealt in pediatrics contributed a more substantial period of time to the life span than did the rest of us.

Outstanding among that outstanding group is one we are here to honor today. Dr. William Weston, has given a life of service to the children—with result that more have lived, fewer have suffered and less have been maimed, and many an anxieties and heartaches of mothers and fathers have been prevented or alleviated. And, best of all, he is still doing it.

Dr. Weston was born in Richland County. He attended Richland County schools and the Patrick Military Academy of Anderson, South Carolina. Then to the University of South Carolina for two years, and then to Sewanee where he graduated. After that, he entered the Medical College of South Carolina where he graduated in 1896, just 58 years ago. He took post graduate medical work at Columbia Medical College and at Harvard. Dr. Weston did general practice until 1912, when he

specialized in pediatrics, being the second man in the South so to do. He is a leader and pioneer in the medical profession in that, he was one of the organizers of the American Academy of Pediatrics and the Southern Medical Association. He is past Councilor from South Carolina to the Southern Medical Association. He is past President of the Columbia Medical Society and was President of the South Carolina Medical Association in 1913. In 1936, he was chosen "Man of the Section" on Pediatrics in the American Medical Association.

For 20 years he served as delegate to the American Medical Association from the Pediatric section. His belief in the profession of medicine and his strict adherence to the high principles of the medical ethics and his understanding of the problems of medicine resulted in his opinion being sought by the rest of those shouldered with responsibility of shaping the policies of American medicine.

Dr. Weston shared his thoughts and knowledge with others, in that many medical meetings have benefited by his talks and papers. He was the first American physician to correctly describe acrodynia in 1922. His work on pellagra from 1909 to 1916 was outstanding. In 1928, he prepared a vitamin chart and 1916 organized the first Hook Worm Clinic in the world in Columbia, South Carolina. In 1930, he called attention to the prevalence of goiter in some states and the lack of it in South Carolina. He pointed out the large iodine content of our soil as an explanation. This gave added incentive to the growing of vegetables in South Carolina, and proved of marked benefit to our entire state. In connection with this new enthusiasm he aided in establishing the chair of Nutrition at the Medical College of South Carolina.

Always recognizing fully the necessity of adequate medical educational activities for the advancement of medicine, he exerted his not inconsiderable influence in securing appropriations for the Medical College. Throughout his medical career, and today, he is a staunch friend of our medical institution.

When we draw up specifications for an ideal representative of the medical profession; one who has the interest of his patient at heart; one who combines intelligent observation, a depth of knowledge, and a keen understanding; one who gives his time to the advancement of medicine yet finds time to take interest in the affairs about him; one who is sympathetic of the problems of his fellow practitioners; one who is always the gentleman and physician, then we draw up the perfect description of Dr. William Weston, whose portrait I am proud to present to the Medical College of South Carolina as a gift from his admiring colleagues.

We will ask his attractive grand-daughter, Miss Ret Weston, the daughter of Dr. William Weston, Jr., to unveil the portrait.

PRESENTATION OF PORTRAIT

Dr. Kenneth M. Lynch—"Dr. and Mrs. Weston and family and friends of the Medical College of South Carolina: You have done us the favor of gathering with us in recognition of Dr. Weston. I say recognition rather than in honor of Dr. Weston because I feel that the honor in this case is done the Medical College.

In recognition of Dr. Weston as a distinguished and accomplished alumnus of this institution, I could attempt to emphasize the story which Dr. Owens has just presented to you, but out of consideration for Dr. Weston I shall not do that. However, what Dr. Owens has said, and what we shall say will be placed in the archives of this institution to accompany this splendid and magnificent gift to this school to which he has been so loyal; he has never failed, never at any time.

There is another particular reason why this portrait belongs here. Dr. Weston is a former member of the faculty of the Medical College of South Carolina. He is truly a servant of mankind.

It gives me great pleasure, it gives the institution pleasure to accept this gift from Dr. Weston's friends.

Now, may I embarrass Dr. Weston by asking if he would mind if I presented to you a living image of the portrait of Dr. William Weston."

Dr. Weston: "Dr. Lynch, Dr. Owens and audience: May I say to you that this is the crowning occasion of my life. It has been a long one and until a few minutes ago I did not know it had been so distinguished, but I now feel reassured about that.

I am also very proud to know that this portrait will be in the Pediatric Section of our new building. I wish to say to this audience too, that the medical profession of South Carolina feels very proud of this institution. We feel that it has done a wonderful job in the past and that it has a wonderful future before it.

Thank you for this occasion."

PRESENTATION SPEECH AT UNVEILING OF A PLAQUE COMMEMORATING DR. LESESNE SMITH NOVEMBER 4, 1954 — MEDICAL COLLEGE OF SOUTH CAROLINA

By George Wilkinson, M. D.

We are here today to unveil a plaque in memory of Daniel Lesesne Smith, a man who mastered the art of living. Born of noble parents, conditioned by the adversity of a cruel war and its aftermath of reconstruction, Dr. Smith, along with his brothers and sisters obtained an education. By sacrifice by his parents and by his own zeal, he finished college and studied medicine in Charleston. He began the practice of medicine in a mountain county, where practice was hard, both physically and emotionally. The appeal of a suffering and impoverished people—living far apart, with prejudices, rugged individualism and ignorance, especially in rudimentary hygiene—gave the young doctor the heat of the crucible necessary for building deep conviction. Traveling by foot and on horseback, over many long roads and trails, furnished the isolation necessary for thinking through many problems. Hovering over a kerosene lantern, with the lines around the whip, trusting a faithful horse, Dr. Smith often made his way home far after the countryside lay asleep. His concern was not for his own convenience and pleasure, but for the patient left behind. Aside from the difficulty in diagnosis and the meager pharmacopeia at hand, his thoughts were about food, sanitation and bedside care.

With reluctance he moved to Great Falls, where conditions bettered his family. Density of population increased his patient roster. Less time was lost traveling lonely roads. But he worked long hours, and studied when many would have gone to bed. His education was advanced by attending medical meetings and availing himself of many short courses in medical centers.

In 1909 Dr. Smith moved his family to Spartanburg. By 1913 his work with children had increased to the point where he was obliged to confine his work to the field in which his deepest interest lay. During the summers he built up an enormous practice in Saluda, just across the line in North Carolina. His friends in Spartanburg joined hands and built

and maintained a baby hospital for the poor.

With the facilities created by himself, his family and friends, he still was not satisfied. From his own experience, he was convinced that in order to improve other physicians in the care of children, short courses in a cool, comfortable place—not too far from where the doctors lived — would provide a medium through which what he had learned could be made more widespread. So the Southern Pediatric Seminar was born. For the seminar Dr. Smith worked with great zeal and sacrifice. The faculty was made up of friends he had made while visiting and attending many hospital seminars and universities. Those who came to teach were delightfully entertained by his devoted wife, who took care of the faculty in her own home. In the first seminar only four students registered. Now the attendance has reached two hundred.

His second ambition was to see the Medical College in Charleston move forward and take its rightful place among other similar institutions. To this end he worked through the alumni, raising funds for a clinic building. As a member of the State Board of Health for many years, he endeavored to focus the activities of the board toward preventive medicine, particularly in children. Beginning in 1914, he attended the children at Cedar Springs. While president of the South Carolina Medical Association in 1925 and 1926, he was instrumental in starting a postgraduate seminar at the medical school in Charleston. In all of his activities, Dr. Smith had the happy faculty of putting himself in the background, while promoting those who occupied the stage, asking no credit and seeking none. His reward was satisfaction derived from implementing needed medical facilities.

Busy as he was, Dr. Smith took time out to master the art of living. He knew how to play and when to stop, how to make new friends and how to keep them. His principal activities were centered about his home, where his wife and four children absorbed his interest, shared in the fun, and grew up with him.

As host and hostess, Dr. and Mrs. Smith will always be loved by those who were privileged to visit in their home.

In the sunset of his career, he was sustained by the success of his children and the institutions to which he had contributed his life. All that is mortal of Dr. Lesesne Smith rests in the bosom of the soil in the red hill country close by the church that he loved, but his spirit pervades these halls and lives on in the shade of the tall trees on the hilltop at Saluda.

BENNETTSVILLE MEETING

The Marlboro County Medical Society will hold its 33rd Annual New Year's Meeting on Thursday, January 13, 1955, at the Bennettsville Country Club. The social hour begins at 6 P. M., dinner at 7 P. M., and program at 8 P. M. The dinner will be served by the Junior Charity League, which has served all of these meetings, and will consist of turkey with all the trimmings, and the famous oyster pie.

Dr. H. R. Pratt-Thomas, Professor of Pathology at the Medical College of S. C., will give a talk on Carcinogenic Effect of Human Smegma and this will be discussed by Dr. J. R. Sosnowski of Charleston, Associate in Obstetrics and Gynecology.

All medical doctors in South and North Carolina are cordially invited to meet with us and enjoy the program and fellowship.

ATLANTIC CITY MEETING AMERICAN MEDICAL ASSOCIATION

June 6-10, 1955

The Council on Scientific Assembly announces the deadline for those who wish to participate in the Atlantic City Meeting, either by reading a paper or presenting a scientific exhibit.

DEADLINE FOR SECTION PAPERS,
DECEMBER 15, 1954
DEADLINE FOR SCIENTIFIC EXHIBIT,
JANUARY 10, 1955

Applicants should communicate with the Secretary or the Representative to the Scientific Exhibit of the Section in which they are interested. Further information may be obtained from the Secretary, Council on Scientific Assembly, American Medical Association, 535 North Dearborn St., Chicago 10, Ill.

The Journal of the South Carolina Medical Association

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Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Original manuscripts, subject to approval by the Editor and the Editorial Board, are desired for publication in the Journal. They should be typewritten, double spaced, on 8½ x 11 paper. References should be complete, and only such as relate directly to statements quoted in the paper. Illustrations will be used as funds permit, or as authors are willing to bear the necessary increase in cost. Short original articles are preferred to long reviews.

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DECEMBER, 1954

The Georgia Medical Society Sesquicentennial

Not many years ago the Medical Society of South Carolina, the first enduring medical society of this state, and the sponsor of our present South Carolina Medical Association, celebrated its founding in 1789. The Society still exists, but since a few years ago is no longer a county unit of the state Association. Its name still creates confusion with the state organization.

On October 12-13 the Georgia Medical Society (of Savannah) celebrated 150 years of existence. It too, has become a county organization. It, too, is confused with the Medical Association of Georgia. And it, too, has a proud record of service and accomplishment which parallels that of the old Charleston society and promises new achievement in the future.

This Journal extends its congratulatory hand to its neighbor across the Savannah River.

Suggestions Regarding Medical College Expansion with Regard to The Roper Hospital and the Community

OVER-ALL OBJECTIVES:

1. Healthy development of the Medical College.

2. Preservation of the present high standard of medical service available to the community by maintaining Roper as a fully accredited hospital closely affiliated with the Medical College.

3. Retention for the Medical College of the good will and support of the community.

4. Encouragement of professional unity in general and in particular avoidance of a schism between full time and part time faculty.

*PURPOSE OR OBJECTIVES OF THE EXPANSION PROGRAM: To raise standards of medical care in the state by

a) Increasing the number of medical graduates, and personnel trained in cognate fields and ancillary services.

b) Making available in the state certain skills and facilities commonly found only in the larger medical centers.

c) Providing facilities for clinical and laboratory investigative work, an essential function of a teaching and post-graduate institution.

d) Providing post-graduate courses.

HOSPITALS: The MEDICAL COLLEGE and THE ROPER.

The College Hospital.

a) To supply clinical material for teaching and investigative work, particularly in the more or less specialty fields—in hospital pay and professional pay classes.

STAFF for COLLEGE HOSPITAL.

A. Hospital pay and agency cases.

1. Full time faculty:—
   a) Administrative.
   b) Teaching and investigative work.
   c) Patient care.
2. Part time faculty:—
   a) Teaching and investigative work.
   b) Patient care.

*The following outline is based upon the premise that the Medical College authorities have decided to institute some form of group practice in the College clinics and hospital.

B. Professional Pay Patients.
   1. Full time faculty.
      According to Medical College practice ideology.
   2. Part time faculty.
      a) Limited number of cases based upon faculty rank, value of faculty member in teaching program, and nature of case as regards teaching and investigative value.
      b) Patient care and professional fees governed by College practice and economic ideology.

Roper Hospital.

To be closely affiliated with the Medical College but financially independent.

Objectives:—

1. To function as a community hospital of high standard.
2. To complement and supplement the clinical teaching facilities of the College Hospital
   a) by providing cases and services such as acute, emergency and contagious, commonly found in a community hospital.
   b) by providing cases on some of the specialty services.

Classes of patients (economic)

a) County indigent.
b) Agency cases over and above those desired by the College Hospital.
c) Professional pay patients.

STAFF FOR ROPER HOSPITAL.

A. County indigent and Agency cases.
   1. Part time faculty.
      a) administrative under heads of College teaching departments.
      b) teaching and investigative work.
      c) patient care.
   2. Full time faculty.
      a) administrative—as regards teaching and residency services.
      b) teaching and investigative work.
      c) patient care.

B. Professional pay cases.
   1. Part time faculty as at present.
   2. Full time faculty. (It is important that full time faculty maintains interest in pay department as well as in other departments of Roper)
      a) Limited number of cases.
      b) Professional fees governed by economic ideology of the College Hospital.
   3. Non-faculty members of Roper Staff.

SPHERES OF COLLEGE HOSPITAL AND ROPER.

The sphere of each must be reasonably clearly defined if the affiliation is to prove successful. The College Hospital will have state support; it is most important that Roper Hospital continue to have county support. The Roper Hospital must be recognized as the Community Hospital and accordingly the proper place for the care of the county indigent cases. It should have referred to it by the College Clinics such agency cases as are not needed by the College Hospital. Cases of the above types are of great value for teaching purposes and are essential for an intern and residency training program. Only by having such services can Roper Hospital be of real value in the teaching program and thus maintain a close affiliation with the Medical College. By such affiliation Roper Hospital would be able to retain its present status and continue to provide for the community the services of a scope and standard not commonly found in a community hospital. It would provide, for the part time faculty in particular, working conditions of a high standard; this is of importance as the part time faculty would have limited privileges in the College Hospital. Proper county support should enable Roper to provide facilities for colored physicians in the care of their patients. This is a most important consideration from a standpoint of community health. By this means adequate facilities could be obtained more economically than by building a separate hospital.

On the contrary, without a sizable block of indigent and agency cases, the Roper Hospital

would become essentially a private hospital doing such charity work as permitted by its endowment. It would become of limited value to the Medical College teaching program, it would have to curtail greatly its intern and residency services and accordingly lose its high standard of accreditation. Its value to the College would be practically lost, resulting in a separation of the two institutions. The community would suffer as the Roper Hospital would no longer be able to provide a reasonably complete medical service of a high standard. The part time faculty would be deprived of satisfactory working conditions. The College Hospital would not fill the breach as to the needs of the community except to the extent of taking a limited number of referred cases, and possibly the county indigent cases. The county would still be faced with the problem of providing suitable facilities for colored physicians in the care of their patients.

It is a paradox of modern medicine that within the shadow of the walls of some of the best hospitals a very poor grade of medicine is practiced. This is not necessary and should not be allowed to take place in Charleston. The best way to prevent such a happening is for the Medical College administrative authorities to recognize publicly that the Roper Hospital, as the community hospital, is the proper place for the care of the county indigent cases. Without such recognition the Roper Hospital is not in a firm position in dealing with the county authorities. In addition, due to its affiliation with the Medical College, the Roper Hospital should have referred to it a sizable block of agency cases. Only by caring for the county indigent and agency cases can the Roper Hospital continue to function on a high plane and be of greatest value to the community, as well as to the College in the student teaching program and in the training of interns and residents.

The Staff of the College Hospital and the Roper Hospital should consist of both full time and part time faculty members. It is desirable that both groups should have assignments in all departments of both hospitals. This would result in a close affiliation and a more effective teaching program.

FULL TIME FACULTY.

The full time system was originated by the Rockefeller Foundation through Dr. Welch at the Johns Hopkins Hospital. Its purpose was to permit those particularly qualified in teaching and research to be free of the cares and responsibilities of private practice as a source of income, by assuring them of an adequate salary. Since its beginning the system has undergone many modifications. In some cases it has been abused to the extent that the prestige of the full time position has been used primarily as the means of obtaining a large income from private patients; teaching and research have not always been given proper consideration. While abuses must be prevented, the purpose of the full time system would be defeated unless provision is made for adequate income for the full time faculty. Even though the nature of the full time position is such that the holder of it is dedicated to teaching and research at some sacrifice of financial gain, any method of remuneration should assure a reasonable income and contain an adequate but diminishing work incentive.

The prestige of a full time faculty position in the State Medical College is very great in the eyes of the physicians of the state, medical students, and particularly in the minds of the patients. It will be greatly increased by the new College Hospital which has been extensively publicized in the professional and lay press. It is reasonable to expect that the number of referred cases will be so great that there will be no problem as to remuneration of full time faculty members from this source. There may be some full time faculty members who do not wish to have their income earning power subject to the limitations of a full time position. These should enter the private practice of medicine and be on the part time faculty. There would be no objection to this in the transition period; however, in the future, measures should be taken to prevent the use of a full time faculty position as a means of subsidy and gaining recognition preparatory to entering private practice. A possible solution would be an agreement that full time faculty members would not enter private practice in the community for a stated number of years.

PART TIME FACULTY.

The Medical College should have on its part time faculty all physicians in the community who have professional and other qualifications of value to the teaching program on the undergraduate and graduate levels. In all departments they should be accorded privileges with corresponding responsibilities. The professional distinction between the full time and the part time faculty members should be no greater than that necessary for administrative purposes. Otherwise the part time faculty will tend to lose interest in the College and will be of relatively little value to it. The prestige of having a college connection is of distinct value to the part time faculty members, particularly so in the case of recently arrived physicians who come to Charleston to practice one of the specialties. The college connection would carry much less prestige, and in some cases be of doubtful value, if privileges in the College Hospital should be unduly restricted. It must be recognized that some of the present members of the part time faculty are well established professionally and have local and national recognition in their special fields. In some cases they would lend prestige to the College Hospital, an attribute of which it cannot have too much. The profession and the public would not readily understand part time faculty members with recognized professional qualifications and of demonstrated worth in the teaching program not being accorded reasonable privileges in a state institution.

The major portion of teaching is still being carried by the part time faculty. It is through their support of the College that the full time positions are possible. As their livelihood is derived from the private practice of medicine they should not be placed at an undue disadvantage by a state institution. Private practice, with possibly a few exceptions, still offers the greatest opportunity for earning a large income, but this has been reduced greatly in the past 25 years due to increasing income taxes, increasing cost of office maintenance, much greater competition in the specialty fields, and the steady encroachment of State Medicine in various forms and guises. Private practice occupies an important place in the scheme of medicine, both in providing medical services for a large segment of the population, and in serving as a yardstick for the establishment of standards of practice. It should not be handicapped by state institutions but should be assisted to continue on a high professional plane.

With the opening of the Medical College Hospital the Roper Hospital will be seriously affected professionally and financially. The professional problems which may arise should be satisfactorily solved by the planned close working affiliation with the Medical College. Financially, the loss of income from state controlled agency cases will present problems connected with operating the Main Building in which are housed both the agency and the county indigent patients. This will result in an increase in the cost of caring for the county indigent cases. The Roper Hospital is not tax supported, and in order to survive it must avoid operating at a financial loss.

In the near future decisions will have to be made concerning the operation of the Roper Hospital Main Building, the care of the county indigent cases, and provision for the colored physicians for the care of their patients. The solution to these problems will determine in large measure the value of the Roper Hospital to the community and to the Medical College, and the closely related standards of medical practice in Charleston. If the Roper Hospital is to function to the best interests of all concerned it must have the full backing of the Medical College.

Wm. H. Prioleau, M. D.

The Journal of the South Carolina Medical Association

Forty Years Ago

DECEMBER 1914

The number was devoted to obstetrics. "Twilight Sleep" was under discussion. The first and fifth districts were organized. Dr. Sam Orr Black, a medical student, wrote a

paper on "Obstetrics in the Slums". The irritant effects of silver nitrate on the eyes of the newborn was noted. A paper read in Columbia on Renal Calculi had Dr. M. H. Wyman as one of its authors.

DEATHS

DR. BENJAMIN CLYDE BISHOP

Dr. Benjamin Clyde Bishop, Greenville, died October 5 after an illness of three weeks.

Dr. Bishop was born October 7, 1899, at Ehrhardt.

He was educated at Carlisle Preparatory School at Bamberg, received his A.B. degree from Newberry College in 1920 and was graduated from the Medical College of South Carolina at Charleston in the class of 1926.

He served his internship at the Greenville General Hospital and for the past 27 years had been engaged in the practice of medicine in this city.

DR. ROBERT ELIJAH MASON

Dr. Robert Elijah Mason, 76, was born at Fair Play on June 8, 1878.

He was educated in the schools at Westminster, and completed his medical training at the University of Georgia where he was a honor graduate in the class of 1900.

He had spent the succeeding 54 years in the active practice of medicine at various points in South Carolina, and for a short time in Charlotte.

He started practice of medicine at Seneca, but later shifted to Charlotte, and then to McCormick County where he remained for 22 years, until 1927, when he moved to St. Stephens, in the lower part of the state.

He had practiced in Anderson for a decade or more.

DR. CLOUGH HENRY BLAKE

Dr. Clough Henry Blake, beloved physician and citizen of Greenwood, died October 16, 1954.

He attended school there and entered the Medical College of South Carolina in 1904, graduating in pharmacy in 1906. He worked as prescription clerk in Lipscomb Drug Store in Columbia until 1908 when he returned to the Medical College and graduated with an M. D. in 1911.

Dr. Blake began his medical practice in Saluda with Dr. Sam M. Pitts. He married Miss Elma Pitts, daughter of Dr. and Mrs. Pitts in 1913.

They came to Greenwood in 1917. Dr. Blake took an active part in professional organizations. He was a member of the Greenwood, South Carolina and American Medical Associations. He was a member and several times president of the District Medical Society, composed of Greenwood, Abbeville, McCormick and Newberry Counties.

He served on the State Board of Medical Examiners from 1934 to 1952. He was a member of Phi Chi medical fraternity at college and a member of the Rotary Club of Greenwood.

DR. HUBERT CLAYTOR

Dr. Hubert Claytor, 91-year-old retired physician of Hopkins, died at his residence November 7.

A graduate of the University of Maryland, he came to Hopkins 68 years ago where he practiced medicine until his retirement ten years ago.

DR. JOHN B. COUSAR

Dr. Cousar was 49 years of age. Having decided on the practice of medicine as a profession he attended the University of Virginia Medical School. After completing his internship in a Chicago hospital Dr. Cousar became a medical officer with the Civilian Conservation Corps, being stationed near MacRae, Ga. After his tour of duty with the CCC he came back to Bishopville to practice medicine.

Dr. Cousar served with distinction with the Armed Forces during World War II, both in the United States and in Europe. Upon leaving the service he was promoted to the rank of full colonel in the U. S. Medical Corps. He received the Purple Heart and the Cross of Honor during his service in Europe.

Upon returning to Bishopville he reopened his office for the practice of medicine but had to retire from general practice some time later due to a heart condition. He became connected with the Veterans Administration office in Columbia, was transferred to the Florence office and then went back to Columbia where he was assistant chief medical officer with the Veterans Administration Hospital.

BLUE CROSS... BLUE SHIELD

An editorial on Blue Cross and Blue Shield in the October issue of *The Scribe* has occasioned considerable comment. Unless it be accepted as a frank and unfriendly attack on our South Carolina Plans—an attitude which is distasteful to me and one which I am unwilling to entertain—then it must have been written by one who is lacking in understanding of some basic principles of our operation.

The unfortunate incident which the author outlined was already familiar to me and one which our Executive Director had already taken steps to rectify. The clerk at Roper Hospital and the clerk contacted in the Charleston Blue Cross office both ruled in accordance with the provisions of the Blue Cross subscription agreement. The provision in the agreement for emergency room coverage of accident and injury cases was made to cover only emergency cases and not to provide other out-patient hospital services. In order to restrict such services to emergency care of accident and injury, a time limit after the occurrence of the injury had to be fixed to define in part what cases were entitled to these benefits. A time limit of twelve hours is written into the agreement. It might just as well have been twenty-four hours, but it actually is only twelve hours. Had it been possible to have gotten a ruling in the particular case from someone with discretionary powers, the case would have been accepted for coverage. Un-

fortunately hospital clerks and even Blue Cross office clerks cannot be granted discretionary powers. They must abide by the provisions of the agreement. The clerks involved in this case did just that. When the circumstances were reported to the Executive Director, he immediately reversed their ruling and through the Medical Director took steps to correct what was not an error in fact but which was inequitable. That he was willing and able to do this illustrates one important difference in attitude toward the subscriber by Blue Cross and that of many commercial insurance carriers toward their policy holders. Considerations of equity are placed ahead of strict conformity to provisions of the contract.

Knowledge and understanding spread slowly. Understanding of provisions and of restrictions of insurance contracts is rarely secured by a simple reading of the contracts. Policy holders usually have to be taught and taught as individuals and not by methods of mass education. When the insured learns by such teaching that his then present need is not covered by his contract, his mental attitude naturally is not good, and sometimes it is truly ugly. It takes tact and sympathetic understanding by him who has to do the teaching. However, these disappointing situations give a marvelous opportunity to hospital employees and to doctors to do a real service to the patient, to the hospital and to the Plan. Although it is true that the hospital frequently has to take the brunt of the patient's anger, and by hospital is meant usually some lesser employee, it is also true that the doctor frequently gets his share of it as well. In either instance, Blue Cross (or the commercial carrier) is hurt most. The interests of the hospital and those of the doctor are intimately tied up with prepaid hospital insurance. Because of those interests, there is selfish motive in assisting in the education of the Blue Cross member as to what his rights and privileges are under his contract. It is their further opportunity, by constructive criticism, to attempt to correct inequities in the agreement. However, there is an important difference between inequities and extent of coverage. The one applies to the administration of the benefits provided in the contract. The other applies to the incorporation in the contract of new coverages. The latter involves a consideration of benefits in relationship to costs. Blue Cross can give only those benefits within the limits of its income from membership dues.

The editorial referred to made reference to allowances paid to doctors by Blue Shield and implied that nearly every group of doctors was dissatisfied with the allowances except the orthopedic men and the obstetricians. It has been our experience that the obstetricians have been the most dissatisfied and the least cooperative of any group. This has come about because of the fact that Blue Shield so far has been unable to include coverage for prenatal and postnatal care, which obstetricians rather generally include in an overall fee, and because the fee allowance for complicated deliveries, so frequently accomplished by the original doctor and a consultant, is admittedly inadequate.

Many orthopedic specialists and surgeons handling complicated fractures and other long drawn out orthopedic conditions have not been happy over the fee allowances.

Our Plan began as a surgical and obstetrical plan, with service benefits to low income members. The basic idea in setting up a fee schedule was to set a fee which was approximately two-thirds of the average normal fee charged by our doctors for the service under question, when rendered to low and middle income people. Participating physicians pledged themselves to accept the fee set as full payment of services rendered such people. Although fees for specific services are still occasionally altered to remove inequities, there seems to be rather general satisfaction with the schedule now in effect. The chief gripe, if it is a gripe, is the maximum limit of $150.00 for any one operation, regardless of its technical difficulties, and a maximum combined fee of $200.00 for the surgical service of any single disability.

Medical (non-surgical) coverage was added about two years ago, tentatively and more or less experimentally. Service benefits were not provided for medical illnesses. Neither were non-hospitalized cases covered. There was a very small additional charge made by the Plan for this admittedly inadequate medical coverage. Partial anesthetic coverage for surgical and obstetric procedures was included in medical coverage. The new contract specifically excluded both medical and surgical benefits during a single hospital admission. No provision for consultation fees was provided. No service benefits were included.

The reception of the new medical coverage by the doctors seems to have been good. Generally, they seem to be jealous of their rights to the fees provided. There have been suggestive indications that the medical allowances of the Plan may at times be more than normal charges. There are some suggestive signs that encourage us to believe that medical service benefits may soon be incorporated in the agreement.

My colleagues, these Plans are your plans. The respective boards are attempting to operate them for you and your patients. Both

Plans are having difficulties. These difficulties stem first from what is termed over-utilization (more than a normal expected number of claims per unit of membership—claims for unnecessary hospitalization, unnecessarily long hospitalization, unnecessarily frequent use of x-ray, laboratory and other examinations and unnecessarily expensive drugs, and unnecessary surgery or surgery which could safely be postponed until after the termination of a waiting period.) They stem secondly from a sincere effort to furnish every bit of coverage that can be given for the subscription income received. Your continued cooperation and patience is earnestly requested.

J. Decherd Guess

NEWS

Florence Doctors H. J. Stokes and L. D. Lide delivered a paper, "Practical Points in Ophthalmology," before a meeting of some 200 eye, ear, nose and throat specialists from the two Carolinas in Durham, N. C., Nov. 3 through 6.

Dr. E. B. Michaux and family have been in Miami, where he officiated as President of the Seaboard of Surgeons.

Dr. Sam Cantey of Marion was elected President of the Pee Dee Medical Association at the Annual Meeting held in Florence. Other Officers elected were:

Charles Kingsbury, Secretary; Wally Hart, Treasurer. Vice Presidents: Jim Thrailkill, Chesterfield; Marshall Coleman, Darlington; Rufus Cain, Dillon; Gene Guyton, Florence; Wayne Reeser, Horry; Roy Howell, Marlboro; and Sam Witherspoon, Marion.

In a special ceremony the doctors of the Pee Dee in practice for 40 years were recognized, and honored with a suitable certificate from the Association.

DOCTORS NAMED to receive appreciation awards and the year they began practice is as follows:

O. A. Alexander, Darlington, 1914; W. J. Beasley, Hartsville, 1904; William L. Byerly, Hartsville, 1911; John R. Claussen, Florence, 1913; E. Marvin Dibble, Marion, 1900; E. B. Gamble, Olanta, 1911; and Benjamin F. Hardy, Dillon, 1913.

Also, James P. Harrison, Cheraw, 1913; T. H. Houck, Florence, 1912; Frank L. Martin, Mullins, 1912; Robert M. Newsom, Ruby, 1911; Joseph L. Powe, Hartsville, 1904; Frank K. Rhodes, Florence, 1911; Chandler M. Scott, Hartsville, 1913; D. D. Strauss, Bennettsville, 1912; Maurice L. Townsend, Society Hill, 1906; and Eugene M. Williams, Lake City, 1910.

Dr. Carl A. Green, discharged from the U. S. Air Force October 12, has begun the practice of medicine, specializing in eye, ear, nose and throat conditions, at Taylor and Harden Streets, Columbia.

Dr. Green is a graduate of Meharry Medical College.

He is a diplomate of the American Board of Opthalmology and a member of the American Academy of Otolaryngology and Ophthalmology.

While in the service Dr. Green was chief of opthalmology at Sampson Air Force Base Hospital, Geneva, N. Y.

Ruth T. Sanders, M. D. has announced the opening of an office for the practice of roentgenology at Catawba Street, Spartanburg, South Carolina.

SOUTH CAROLINA'S STATUTES CONCERNING NATUROPATHY

56-901. *Naturopathy defined.*

"Naturopathy" is hereby defined to mean the use and practice of psychological, mechanical and material health sciences to aid in purifying, cleaning and normalizing human tissues for preservation or restoration of health according to the fundamental principles of anatomy, physiology and applied psychology, as may be required. Naturopathic practice employs, among other agencies, heat, light, water, electricity, psychology, diet, massage and other manipulative methods. These agencies are known as psychotherapy, suggestotherapy, hydrotherapy, electrotherapy, mechanotherapy, biochemistry, external appliances, mechanical and electrical appliances, hygiene, first aid, sanitation, heliotherapy and dietetics. The use and practice of phytotherapy, minor surgery, obstetrics and gynecology, autotherapy and biologicals shall be a part of and included in the practice of naturopathy.

-902. *Board of Examiners.*

There is hereby created a board of naturopathic examiners to be known as the South Carolina Board of Naturopathic Examiners. Whenever the terms of office of the members of the Board are about to expire the South Carolina Naturopathic Association shall recommend to the Governor, who shall appoint, four members of the Board, who shall be members of the South Carolina Naturopathic Association and whose term of office shall be for a period of four years.

-903. *Organization; rules and regulations; meetings.*

The Board shall meet within ten days after its appointment every four years and organize by electing a president, secretary and treasurer and adopting reasonable rules and regulations for the transaction of business. It shall meet in June and November of each year.

-904. *General power with respect to naturopathy.*

The Board may transact any business or legal matters pertaining to the practice of naturopathy in this State.

-905. *Application and fee.*

All applicants for examination and licensing must file with the secretary of the Board at least fifteen days prior to its regular meeting time proper credentials and a fee of twenty-five dollars.

-506. *Qualifications of applicants.*

Each applicant for examination and licensing to practice naturopathy in this State must be a graduate of a regular four year high school course and a two years premedical course and must have completed and hold a diploma from an accredited school, college or university of naturopathy conferring the degree of doctor of naturopathy recognized by the South Carolina Board of Naturopathic Examiners.

-507. *Recognized school, college or university of naturopathy defined.*

Any Class A school, college or university legally chartered and having a regular professional course in naturopathy and its allied branches of four years of nine months each, making a total of four thousand four hundred hours and including in its curriculum bacteriol-

ogy, anatomy, diagnosis, comparative medicine, physiology, etiology, hydrotherapy, histology pathology, phytotherapy, biology, toxicology, electrotherapy, chemistry, hygiene and sanitation, massotherapy, analysis, biochemistry, orthopedics, symtomatology, physiotherapy, practice of naturopathy, autotherapy, ethics and jurisprudence, dietetics, gynecology and obstetrics shall be recognized by the South Carolina Board of Naturopathic Examiners and shall be a recognized school, college or university of naturopathy.

-908. *Subjects and type of examinations.*

The Board may name the branches of naturopathy and its allied sciences in which the applicant for licensing shall be examined and shall hold written or oral examinations or both, in the discretion of the Board.

-909. *Reexamination after failure.*

In case an applicant fails to pass the examination he shall be entitled to a second examination at the next regular meeting of the Board.

-910. *Licensing of nonresident naturopaths.*

Any person of good moral character licensed by a naturopathic board of any other state whose requirements are commensurate with the requirements of this State may in the discretion of the Board and upon the payment of fifty dollars be granted a license to practice in this State without examination.

-911. *Licensees register in clerk's office.*

Every licensed naturopathic physician shall be required, after receiving a certificate of qualification or license from the Board, to register in the county in which he resides with the clerk of court's office and pay a fee of fifty cents.

-912. *Authority and duties of naturopaths.*

All naturopathic physicians who are in active practice and licensed in this State may sign birth, death and health certificates, shall be required to report all infectious and contagious diseases to the State Board of Health and shall be accorded the use of the State biological and chemical laboratories.

-913. *Naturopaths not to practice medicine, osteopathy, etc.*

Nothing in this chapter shall be held or construed to authorize any naturopathic physician licensed hereunder to practice materia medica or surgery, nor shall the provisions of this chapter in any manner apply to or affect the practices of osteopathy, chiropractic, Christian Science or any other treatment authorized or provided for by law for the cure and prevention of diseases and ailments.

-914. *Grounds for suspension or revocation of license.*

The Board may suspend or revoke, by a majority vote of its total membership, any license which may have been given under the provisions of this chapter to any practitioner to practice naturopathy in this State for any one or more of the following causes shown at a hearing before it, to wit:

(1) That any diploma, license, certificate or other credential illegally or fraudulently obtained by the applicant was presented to or filed with the Board and considered by it in granting the license;

(2) That a license has been applied for and issued under an assumed name for the purpose of shielding dishonesty or a criminal record;

(3) Conviction of any criminal operation or habitual drunkenness or adjudication of insanity;

(4) Immoral or dishonorable conduct which would reflect upon the licensee's professional competency;

(5) Addiction to any harmful drug habit;

(6) Unprofessional conduct bringing discredit upon the profession; and

(7) Conviction of a felony or misdemeanor involving moral turpitude or professional dishonor in which case the record of the conviction, or a certified copy thereof, certified by the clerk of court and by the judge in whose court the conviction is had shall be conclusive evidence thereof.

-915. *Charges against licensee and notice thereof.*

Whenever the Board shall have cause to believe that any license issued by it should be revoked because of the existence of some ground for revocation as set forth in 56-914, it shall file or cause to be filed with its secretary written charges against the accused, specifically setting forth the offense, act or conduct complained of. A copy of such charges shall be forthwith delivered to the accused practitioner in person or by registered mail or left with some person of sound discretion either at his place of business or place of last known residence, either of which shall constitute sufficient notice to justify proceeding with a hearing of the charge. In addition to the delivery of a copy of the charges, the Board shall, at the same time, advise the accused of the hour, day and place of a hearing of the charges and warn him to be present, if he so desired, and to defend the action.

-916. *Hearing and finding of Board.*

The accused practitioner shall be permitted to be present in person and by attorney at the hearing and at the taking of all testimony relative to the charges. Any member of the Board may administer oaths to all persons testifying at any such hearing. The accused shall be allowed at least ten days from the date of such notice to him of the charges before the hearing shall be held. The Board shall receive reasonable evidence, whether for or against the accused, and the Board shall not be bound by the strict rules of evidence as required in a court. The findings of facts of the Board shall be conclusive. The Board shall reach its findings and set forth its action thereon and a certified copy of such findings and of the action of the Board shall be served upon the accused practitioner.

-917. *Appeal.*

The practitioner, if he is dissatisfied, may apply to the court of common pleas of the county in which he resides or practices for a writ of certiorari and the questions to be determined by the court on such writ of certiorari shall be as provided by law and the decisions of the Supreme Court of this State.

-918. *Pay certain funds to public school fund.*

If at the close of any fiscal year there remains in the hands of the Board more than five hundred dollars over and above all indebtedness, the amount so held shall be turned over to the public school fund.

-919. *Penalties.*

Any person violating any of the provisions of this chapter shall be guilty of a misdemeanor and punishable in the discretion of the court.

PRESIDENT'S PAGE

The increasing number of suits at law against physicians is a problem of concern to all of us. If the present trend continues, it may become necessary for the component State Medical Associations to attempt to underwrite their own mal-practice insurance. Our best thoughts should be concentrated on how to combat this sinister threat to medicine.

It appears to the writer that the application of the golden rule in daily dealings with our patients will do more than anything to remedy the situation. If the feeling can be brought about in each individual patient that the physician's utmost in being done in his behalf, then it is very doubtful if a suit would be entered. It stands to reason that if there were a cordial relationship between the physician and the patient, the patient would endure much before bringing suit against one in whom he has confidence and trust. Of course, there is a certain percentage of individuals who lack the basic qualities and virtues but they should be recognized and handled with extreme caution.

A better physician-patient relationship would decrease the number of mal-practice suits and at the same time lessen the likelihood of State Medicine.

Tom Gaines

Amebiasis[1] a "Poorly Reported" Disease

Until serious complications arise, amebiasis may pass unrecognized and patients receive only symptomatic treatment.

Although amebiasis is a disease with serious morbidity and mortality, statistics on its incidence[1] are incomplete because its manifestations are not commonly recognized and consequently not reported.

"*Vague symptoms*[2] *referable to the gastrointestinal tract, such as indigestion or indefinite abdominal pains, with or without abnormally formed stools, may result from intestinal amebiasis. Not infrequently in cases in which such symptoms are ascribed to psychoneurosis after extensive x-ray studies have been carried out, complete relief is obtained with antiamebic therapy.*"

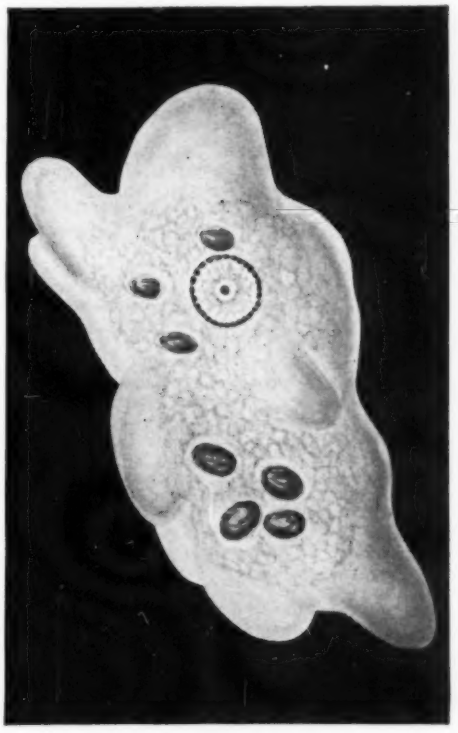
To prevent possible development of an incapacitating or even fatal illness and to eliminate a reservoir of infection in the community, diagnosing and treating[3] even seemingly healthy "carriers" and those having mild symptoms of amebiasis is advised.

Early diagnosis[1] is important because infection can be rapidly and completely cleared, with the proper choice of drugs and due consideration for the principles of therapy. For treatment of the bowel phase these authors find Diodoquin "most satisfactory."

For chronic amebic infections, Goodwin[4] finds Diodoquin to be one of the best drugs at present available.

Diodoquin, which does not inconvenience the patient or interfere with his normal activities, may be used in the treatment of acute or latent forms of amebiasis. If extraintestinal lesions require the use of emetine, Diodoquin may be administered concurrently. It is a well tolerated and relatively nontoxic orally administered amebacide, containing 63.9 per cent of iodine.

Diodoquin (diiodohydroxyquinoline), available in 10-grain (650 mg.) tablets, reduces the course of treatment to twenty days (three tablets daily). Treatment may be repeated or prolonged without serious toxic effect. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.



Endamoeba histolytica (*trophozoite*).

1. Hamilton, H. E., and Zavala, D. C.: Amebiasis in Iowa: Diagnosis and Treatment, J. Iowa M. Soc. *42*:1 (Jan.) 1952.

2. Goldman, M. J.: Less Commonly Recognized Clinical Features of Amebiasis, California Med. *76*:266 (April) 1952.

3. Weingarten, M., and Herzig, W. F.: The Clinical Manifestations of Chronic Amebiasis, Rev. Gastroenterol. *20*:667 (Sept.) 1953.

4. Goodwin, L. G.: Review Article: The Chemotherapy of Tropical Disease: Part I. Protozoal Infections, J. Pharm. & Pharmacol. *4*:153 (March) 1952.

OPINION OF JUDGE HENDERSON ON NATUROPATH'S SUIT

STATE OF SOUTH CAROLINA
COUNTY OF SPARTANBURG

IN THE COURT OF COMMON PLEAS

Dr. M. S. Dantzler, individually and as President of the South Carolina Naturopathic Physicians Association, and Dr. J. B. Branyon, individually and as Secretary-Treasurer of the South Carolina Naturopathic Physicians Association,
Plaintiffs,

—vs—

T. C. Callison, Attorney General of the State of South Carolina,
Defendant.

ORDER

This is a class action on behalf of all duly licensed Naturopathic Physicians. The Complaint in effect states that due to previous opinions of the Attorney General of South Carolina Naturopathic Physicians are not allowed to sell or use narcotic drugs, or at least are embarrassed in obtaining and handling such drugs.

By the Demurrer the defendant admits the status of the plaintiffs and their right to sue, and puts the question squarely before the Court as to whether or not licensed Naturopathic Physicians are given the right to administer medicine and drugs, including opium and its derivatives such as morphine, codeine and the other drugs listed in the Complaint. While admitting duly pleaded statements of fact, the Demurrer admits no conclusion of fact or law.

Naturopathy is defined by Section 56-901 of the 1952 Code of Laws of South Carolina as follows:

> "'*Naturopathy*' is hereby defined to mean the use and practice of psychological, mechanical and material health sciences to aid in purifying. cleaning and normalizing human tissues for preservation or restoration of health according to the fundamental principles of anatomy, physiology and applied psychology, as may be required. Naturopathic practice employes, among other agencies, heat, light, water electricity, psychology, diet, massage, and other manipulative methods. These agencies are known as psychotherapy, suggesto-therapy, hydrotherapy, electrotherapy, mechanotherapy, biochemistry, external appliances, mechanical and electrical appliances, hygiene, first aid, sanitation, heliotherapy and dietetics. The use and practice of phytotherapy, minor surgery, obstetrics and gynecology, authotherapy and biologicals shall be a part of and included in the practice of naturopathy."

In 1949, the Legislature adopted what is now Section 56-907 showing the course of study which Naturopaths are required to take. This is as follows:

> "Any Class A school, college or university legally chartered and having a regular professional course in naturopathy and its allied branches of four years of nine months each, making a total of four thousand, four hundred hours, and including in its curriculum bacteriology, anatomy, diagnosis, comparative medicine, physiology, etiology, hydrotherapy, histology, pathology, phytotherapy, biology, toxicology, electrotherapy, chemistry, hygiene and sanitation, massotherapy, analysis, biochemistry, orthopedics, symtomatology, physiotherapy, practice of naturopathy, autotherapy, ethics and jurisprudence, dietetics, gynecology and obstetrics shall be recognized by the South Carolina Board of Naturopathic Examiners and shall be a recognized school, college or university of naturopathy."

There is a section of the Code, Section 56-910, which allows those who have been licensed by other States to practice naturopathy within this State upon the payment of Fifty ($50.00) Dollars. Section 56-912 gives the right to Naturopathic Physicians to sign birth, death and health certificates. However, of great significance is Section 56-913, which is as follows:

> "Nothing in this chapter shall be held or construed to authorize any naturopathic physician licensed hereunder to practice materia medica or surgery, nor shall the provisions of this chapter in any manner apply to or affect the practices of osteopathy, chiropractic, Christian Science or any other treatment authorized or provided for by law for the cure and prevention of diseases and ailments."

There have been many cases from other States defining naturopathy. This definition is found in 70 CJS pages 808, 809:

> "A system of physicial culture and drugless treatment of disease by methods supposed to simulate or assist nature; a drugless system of therapy by the use of physical forces, such as air, light, water, heat, massage, etc.; a process or system whereby remedies for disease are discovered and whereby they are applied to the healing of disease. It is one of a number of fields in the art of healing which have been recognized by some legislatures as accepted processes of preventive and curative medicine. Naturopathy embraces, under some statutes, the use and practice of psychological, mechanical, and material health sciences to aid in purifying, cleaning, and normalizing human tissues for preservation or restoration of health according to the fundamental principles of anatomy, physiology, and applied psychology. The practice of naturopathy, under some statutes, includes the use and practice of phytotherapy, and also minor surgery, obstetrics and gynecology, autotherapy, and biologicals."

Licenses to Naturopaths are provided for by the Code sections above set out. However, they are limited licenses, and not general licenses to practice all branches of medicine. See 70 CJS page 868, from which the following is taken:

> "Licenses issued under some statutes are limited with respect to the scope of practice permitted, since persons pretending knowledge and instructions in a pursuit of a particular method and holders of restricted licenses may not practice branches of the art of healing not embraced within the subjects on which the licensee has been examined, and which by his certificate he is authorized to practice."

This limitation is recognized by the case of *Williams* v. *Capital Life and Health Insurance Company*, 209 SC 512, 41 SE 2d 208. Incidentally, this case goes into the history of the naturopaths in this State to some extent. It is the first case on Naturopathy in this jurisdiction. It throws considerable light upon the history of the Acts involved. The only other case is that of *Jacoby* v. *State Board of Naturopathic Examiners*, 219 SC 66, 64 2d 138. This goes into the powers of the Board of Naturopathic Examiners. Neither case, however, decides the question at issue here.

It will be noted that Code Section 56-901 lists many methods of treatment open to Naturopaths. Most of these are treatment by heat, light, water, electricity, psychology, diet, massage and physical manipulations. In that section there is a total absence of anything allowing Naturopaths to practice materia medica.

Actually Section 56-913 says that nothing in the chapter shall be held or construed to authorize any naturopath to practice materia medica or surgery. Section 56-907 does not even provide that prospective naturopaths study materia medica. There are many definitions for materia medica found in WORDS AND PHRASES. The following are some of the definitions of these terms:

"Materia Medica: 'Drug remedies are known collectively as the Materia Medica or medicinal materials. It is a science that deals with the study of sources, constituents, physical properties, chemical characteristics, preparations and dosage of medicinal materials.'"

Davison Textbook on Pharmacology—1949.

"Materia Medica: 'The study of drugs from the standpoint of their botanical and chemical properties.'"

Grollman's Textbook on Pharmacology—1954.

"Materia Medica: 'Drug remedies are known collectively as the 'Materia Medica' or medicinal materials. The science which deals with the properties of drugs is called Materia Medica.'"

Bastedo's Textbook of Pharmacology—1947.

"Materia Medica is the division of Pharmacology that treats of the sources, descriptions, and preparation of drugs. It is an older term and its use in medicine appears to be diminishing. Years ago as a didactic, descriptive body of knowledge concerning drugs, materia medica had a prominent place in the medical curriculum. It has now been replaced by the experimental science of pharmacology."

Krantz and Carrs Textbook of Pharmacology—1954.

It is argued that by allowing the practice of phytotherapy the Legislature meant to allow the use of drugs by the plaintiffs. The word "phytotherapy" is defined in 70 CJS at page 815 as:

"The use of plants to heal; treatment by means or with the aid of plants or remedies of botanical origin."

This word has been construed by the United States Circuit Court of Appeals in the case of *Perry* v. *Larson*, 104 F 2d 728, as not including the use of narcotic drugs or opium derivatives. Incidentally, the Perry case involved an attempt by the Naturopaths of Florida to use and prescribe narcotics under the law then existing in Florida. The case is first reported in 25 F Sup 728 and affirmed by the Circuit Court of Appeals in 104 F 2d 728. After this decision, which was in 1939, the Florida Legislature amended the Florida law and a lower court's opinion held that the Naturopaths could use these drugs under the amended Act. This year the Florida Court again had the opportunity to study the naturopathy situation as will be seen by reference to the case of *State Department of Public Welfare* v. *Melser*, 69 So. 2d 347, about which more later.

It is contended that the use of the word "biologicals" in Section 56-901 gives the plaintiffs the right to use drugs. I do not think this is so. The word "biologicals" is defined as follows:

"Biologicals—Medicinal preparations made from micro-organisms and their products: they include serums, vaccines, antigens and antitoxins."

The American Illustrated Medical Dictionary—Dorland 21st Edition.

It is also suggested that by authorizing the plaintiffs to practice minor surgery, obstetrics and gynecology, they were given the right to use the drugs desired by them. This question was up in the case of *Georgia Association of Osteopathic Physicians & Surgeons, Inc.* v. *Allen, Collector of Internal Revenue*, reported first in 31 F Sup 206, and affirmed in 112 F 2d 52. It appears from these cases that the State of Georgia in 1935 enacted a statute forbidding the sale of narcotics except on written order or prescription of a lawfully authorized practitioner of medicine, dentistry, or veterinary medicine. The statute further allowed physicians, dentists and veterinarians to prescribe, administer and dispense narcotic drugs. It was claimed that the Osteopaths were physicians within the meaning of the 1935 law and that they had the right to use the drugs as an integral and essential part of their professional work.

From 112 F 2d 52, it will appear that Osteopathy from the beginning contemplated a drugless science of medicine and that Osteopathy is the very antithesis of any science of medicine involving the use of drugs. The same applies to the practice of Naturopathy, as will be seen from its definition in Corpus Juris Secundum, American Jurisprudence, and Words and Phrases. However, the Osteopaths claimed that since they were given the right to practice obstetrics, they impliedly were authorized to use narcotics. The Court in 31 F Sup 205-206 held that this did not allow the use of drugs but only allowed the practice of obstetrics according to the school of the Osteopaths, and that since Osteopathy is a drugless system of medicine, no drugs could be used in practicing obstetrics, especially in view of the flat prohibition of the use of narcotics except by licensed surgeons, dentists and others allowed by law to use these drugs.

It is significant that in the rules and regulations of the State Board of Health governing the practice of midwifery in this State, the midwives are forbidden to use any drugs except under the immediate instructions of a licensed physician, showing that obstetrics can be performed without drugs.

We now come back to the Florida case of *State Department of Public Welfare* v. *Melser, supra*. By examination of the report of this case and of the case of *In Re: Complaint of Melser*, 160 Fla. 333, 32 So. 2d 742, it will be seen that the Complaint in this case is practically word for word, or in many respects, the same as the Complaint in the last Florida case. The significant thing is, however, that after the United States Circuit Court of Appeals in the *Perry* v. *Larson case, supra*, has held that Naturopaths could not prescribe narcotics, the Florida Legislature amended the law, and that thereafter the Florida Court upheld the right of the Naturopaths in this respect. When the last Melser case came up, it was decided by the Supreme Court of Florida en banc, which adhered to the principle of stare decisis and upheld its opinion reported in 32 So. 2d 742, which was nothing but an affirmance of the lower Court's opinion without any reasons or written opinion. To fully understand the last Melser case, it should be read in toto. There were strong dissents in this case. The first opinion filed held that Naturopaths could not use these narcotic drugs. A rehearing was granted; and on re-hearing it was held that the question of whether or not these drugs could be used was not properly before the Court and that, therefore, it would stand on its opinion reported in 32 So 2d 742. The final opinion was a four to three one. The Court, in its 1953 opinion, quotes from the *Perry* v. *Larson* case above set out as follows:

"In a well reasoned opinion in the case of Perry v. Larson, 5 Cir., 104 F 2d 728, 730, which construed the Florida 'Uniform Narcotic Drug Law', it was held that a naturopath was not authorized to prescribe narcotic drugs. In that opinion Judge Sibley, speaking for the United States Court of Appeals for the Fifth Circuit, said:

"But it is argued that the statute expressly allows phytotherapy, which means the use of plants to heal, and that these narcotics are derived from poppy plants and cola leaves. But so are

aconite and belladonna, also powerful drugs, derived from plants. Although such drugs are of plant origin, their prescription is not the phytotherapy meant, but it is the use of materia medica reserved to the practitioner of medicine and denied to the naturopathic practitioner. The medical terms used in the statute in describing naturopathy are strange to common speech, and the proviso which follows and limits them must be given controlling effect. 'The office of a proviso, generally, is either to except something from the enacting clause, or to qualify or restrain its generality, or to exclude some possible ground of misinterpretation of it, as extending to cases not intended by the legislature to be brought within its purview'."

Section 56-1101 of our Code defines Osteopathy in part. This definition reads in part as follows:

"Osteopathy is hereby defined as a complete system of therapeutics embracing all scientific subjects pertaining to the healing art except materia medica.—The practice of osteopathy consists principally in the correction of all structural derangements by manipulative measures, including physiotherapy and electrotherapy, minor surgery, diet, hygiene and obstetrics."

The Georgia law is practically the same, and it was held in the case of *Georgia Association of Osteopathic Physicians & Surgeons, Inc.* v. *Allen, Collector of Internal Revenue*, 112 F 2d 52, that such statutory provisions do not allow osteopaths to use narcotic drugs. The Osteopathy law ties in with our Naturopathy law. Both laws omit from the practice of such healers the use of materia medica.

Our Uniform Narcotic Drug Act was passed in 1934, at which time we had no laws allowing the practice of Naturopathy. The word "physician" is defined in Section 32-1462(1) as follows:

"'*Physician*' means a person authorized by law to practice medicine in this State and any other person authorized by law to treat sick and injured human beings in this State *and* to use narcotic drugs in connection with such treatment;" (Italics added.)

To fall within this definition of "physician", one must be "authorized by law to use narcotic drugs". Naturopaths are not so authorized.

Section 32-1466 allows sales of narcotics, among other things, to a physician, dentist or veterinarian. Section 32-1473 allows the professional use of narcotics by physicians, dentists or veterinarians. Nowhere does this Act allow the use of such drugs by Osteopaths, Naturopaths or others.

The Georgia case of *Association* v. *Allen* above referred to holds that physicians or practitioners of medicine as defined in the Uniform Narcotic Act refer only to those physicians who are qualified to practice all branches of medicine, not to the limited physicians such as Naturopaths and Osteopaths. It is true that our case of *Williams* v. *Capital Life and Health Insurance Company* holds that for certain purposes an Osteopath, a Homeopath, a Chiropractor, a Magnetic Healer and a Naturopath are practitioners in a field of medicine and a physician within their respective limited fields. However, that case involves only the right of a naturopath to sign certificates in connection with health and accident insurance. It does not touch upon the use of narcotics by such limited practitioners.

The case of *State Board of Medical Registration & Examination* v. *Scherer*, Indiana 1942, 46 NE 2d 602, 221 Ind. 92, is another case showing that Naturopaths generally are forbidden to prescribe or handle this type of drug.

Another statute of this State, now Section 56-1313, prohibits the giving away, selling, distributing, or possession, except on a prescription of a duly licensed physician, dentist, or veterinarian, of a long line of drugs. There is nothing in this section allowing the handling of prescription of these drugs by Naturopaths. These include the sulfa drugs, abortifacient drugs, benzedrine, hormones and other derivative drugs.

Section 32-1496 forbids the sale of barbiturates or their compounds except upon a written prescription of a licensed physician or the prescription of a person authorized to prescribe narcotic drugs. Section 32-1497 provides that nothing contained in this chapter shall prevent the selling and handling of barbiturates by licensed physicians, licensed dentists, or licensed veterinarians. There is no exception here in favor of Osteopaths, Naturopaths and others of limited power.

In view of all of the above, and in view of the known dangers of the improper use of narcotics, barbiturates and the other restricted drugs, it is clear that the Legislature did not mean to allow Naturopaths to use or prescribe narcotics, barbiturates and the other restricted drugs. As will be seen in the article in American Jurisprudence on Physicians and Surgeons, each special type of healer or school of medicine is to be confined to its own theories and method of practice.

Historically, the practice of Naturopathy was a drugless practice, and still is. The exceptions made in the case of Osteopaths and Naturopaths, prohibiting them from the use of materia medica and surgery, can only mean that they were not to use these drugs and that they were not such physicians as are defined by the Uniform Narcotic Act.

There are several cases which say that merely because a certain course of study is prescribed in order to obtain a particular kind of license, that does not mean that the licensee is authorized to practice everything he studies. The following is taken from *Georgia Association of Osteopathic Physicians and Surgeons* v. *Allen*, 31 F Sup 213:

"It is true that applicants are examined in anatomy, physiology, chemistry, toxicology, pathology, diagnosis, hygiene, obstetrics, gynecology, surgery, medical jurisprudence, principles of osteopathy and such other subjects as the Board may require. However, the license authorized by 84-1209 does not necessarily include everything embraced in the examination. The license authorizes only the practice of osteopathy, which the same act classifies as a drugless school of practice. It may be necessary for an osteopath to know numerous subjects in order to make a diagnosis and to determine whether osteopathic treatment or some other treatment is indicated. He should know when not to give an osteopathic treatment.

"A chiropractor is examined in anatomy, physiology, symptomatology, pathology, physical diagnosis, neurology, chemistry, hygiene and sanitation, chiropractic orthopedy, nerve tracing and adjusting, as taught in chiropractic schools. His license, however, authorizes only the adjustment of patients (84-509). His knowledge must be broader than his practice; he must know what he practices but may not practice all he knows."

Upon the authorities above cited, it is my opinion that Naturopaths are not allowed to use narcotics, barbiturates and the other drugs contended for by them in the Complaint. It is, accordingly,

ORDERED that the Demurrer be, and it is hereby, sustained, and the Complaint is dismissed.

E. H. HENDERSON
PRESIDING JUDGE

October 11, 1954

WOMAN'S AUXILIARY
SOUTH CAROLINA MEDICAL ASSOCIATION

President: Mrs. A. T. Moore, Columbia, S. C. **Publicity Secretary: Mrs. N. D. Ellis, Florence, S. C.**

DR. FRANK C. OWENS SPEAKS TO EXECUTIVE BOARD LUNCHEON THE SITUATION IN REGARD TO NATUROPATHS

Dr. Frank C. Owens spoke to the Executive Board of the Woman's Auxiliary to the South Carolina Medical Association at luncheon at the Forest Lakes Country Club in Columbia, Friday, November 12, on a phase of public relations, enlightening the group on the situation in regard to naturopaths. He began with a definition of naturopathic medicine which is rather ambiguous in itself and traced its origin back to 1896. Some of the existing Schools of Naturopathy are mere farces, Dr. Owens said, often not requiring a high school education, and awarding degrees after nominal lecture periods with no clinical work. He said the South Carolina Naturopathic Board was established in 1937 and requires a four-year high school course, two years of pre-medical work, and graduation from an accredited School of Naturopathy. South Carolina naturopathic physicians are privileged to use the state biology and chemical laboratories. There are three naturopathic hospitals in the State, according to Dr. Owens, at Travelers Rest, Seneca, and near Columbia. Naturopaths in this State are now seeking enactment of a state law which will enable them to write prescriptions and Dr. Owens pointed out the inherent dangers should that law be passed. He said the duty of medical doctors as he saw it was to protect the public from inferior, dangerous and pseudo-medical care, and as a remedy to the situation in regard to naturopaths he urged that their activities must be confined within the limits of their training and their licenses must be refused or revoked if they exceed these bounds.

Mrs. E. Gordon Able of Newberry, first vice-president of the state auxiliary, presided in the absence of the president, Mrs. Austin T. Moore of Columbia. The blessing was said by Mrs. H. L. Timmons.

Other guests present were Dr. and Mrs. O. B. Mayer (He is president-elect of the South Carolina Medical Association); Dr. Kirby D. Shealy (Dr. Shealy is president of the South Carolina Academy of General Practice and Mrs. Shealy is a councilor for the Woman's Auxiliary to the Southern Medical Association); Dr. and Mrs. A. F. Burnside (Dr. Burnside is a member of the board of trustees of the Medical College of South Carolina and Mrs. Burnside is a director of the Woman's Auxiliary to the A. M. A.); and Mrs. Leon Bryan, president of the Columbia League of Women Voters.

Beautiful autumn flowers decorated the tables and minature figures of doctors and nurses standing on tiny pill boxes made attractive place cards. Mrs. R. F. Haines of Columbia was in charge of decorations.

A business meeting was held preceding the luncheon at which Mrs. C. R. May, Jr., of Bennettsville, president-elect, led in the auxiliary pledge. Mrs. A. T. Moore's president's report was read by Mrs. H. L. Timmons in the absence of the president due to illness. The Board voted to express their appreciation to Mrs. E. Gordon Able, first vice-president, for her capable presiding in Mrs. Moore's absence and instructed the secretary to write Mrs. Moore expressing how much her presence was missed and extending best wishes for her speedy recovery.

Reports were heard from state officers, state chairmen, and county presidents. These reports incorporated plans for the year. Mrs. Alton G. Brown, chairman of the Jane Todd Crawford Loan Fund and Nurse Recruitment announced that February 6-12 would be State Nurse Recruitment Week and the State Rally for Future Nurses Clubs would be held at Winthrop College February 11 and 12. Mrs. Brown stated that most Schools of Nursing in South Carolina have capacity student loads and that some of the credit is certainly due the Auxiliary for their constant work in the field of Nurse Recruitment. She also said that there have been fewer "drop-outs" this year, partly because high school girls are finding out through Future Nurses Clubs if they are suited for nursing careers.

Mrs. David F. Adcock of Columbia, chairman of the Student Loan Fund, reported that two medical students are being assisted by loans and read letters from each of these young men expressing their appreciation to the Auxiliary for the aid they are receiving. Both are students at the Medical College in Charleston.

From the reports of county presidents it was evident that each auxiliary in the state will endeavor to increase its membership this year. Many auxiliaries are giving financial aid to student nurses; many are helping to promote social activities for nurses in towns where hospitals are situated; many are cooperating with community health projects; all are working on nurse recruitment and various phases of public relations. Sumter Auxiliary has established a Memorial Fund for Mrs. Davis Moise and Charleston for Mrs. B. O. Ravenel. Program topics include Civil Defense, Mental Health, Safety, Excess Weight—(Cause and Cures), Cancer, Heart Disease, American Medical Association, Animal-Carried Diseases, Socialized Medicine in Australia and England, New Techniques in X-Ray, Juvenile and Domestic Courts, and many other pertinent subjects, as well as programs designed to promote sociability and better public relations.

Presidents-elect of county auxiliaries were invited to attend this board meeting. It was announced that the annual Convention would be held in Charleston, May 9-12. Mrs. Richie H. Belser of Charleston is chairman and Mrs. K. M. Lippert of Columbia is co-chairman. The president of the Woman's Auxiliary to the A. M. A., is to be our guest.

The following nominating committee was elected:
Mrs. David A. Wilson, Greenville
Mrs. Kirby D. Shealy, Columbia
Mrs. Alton G. Brown, Rock Hill

PARAPHRASE ON THE PHYSICIANS HIPPOCRATIC OATH FOR DOCTORS' WIVES

I swear by Minerva, the goddess of wisdom, by Venus, Juno, Vesta and the Penates, goddesses of love, womanhood and the home, that according to my ability and judgment I will keep this oath and stipulation: to reckon this profession, which I share, sacred; to share its hardship equally with my husband as well as its benefits; to share his disappointments with good grace and with such tolerance that they shall be easier for him to bear; to teach our children the importance of respecting the medical profession and of regarding as confidential any knowledge which may come to them by accident in our home.

I will follow the system of regimen which, according to my best judgment, I consider best for the doctors' household and will abstain from whatever is

unsuitable for a physician's home. I will give out no information, if asked, which I have not the authority to give. With purity and holiness will I pass my life and practice my art of home-making.

Whatever in connection with my husband's professional practice or not in connection with it, I may see or hear, I will not divulge, holding that all such things should be kept secret. I will abstain from any display which might be deemed unfitting to a doctor's wife and will be sure at all times that jealousy does not enter into my life or that of my husband. I will refrain from disparaging comment about any of my husband's colleagues, remembering always that not all personalities and viewpoints can be alike.

While I continue to keep this oath inviolate, may it be granted to me to enjoy life and to help my husband to practice his profession, respected always by all who know us both; but should I break through and violate this oath, may the reverse be my lot.

Elizabeth D. Whetsell
Public Relations Committee

DOCTORS' WIFE

The doctors' wife is brave indeed . . . Because she has to live . . . With him who loves her but who has . . . So little time to give . . . He wants to linger at her side . . . From morning until night . . . But always there are patients in . . . Their sad and painful plight . . . And always there are calls that come . . . At dinner or at dawn . . . And true to his profession, he . . . Gets up and he is gone . . . He may amass a fortune for . . . His loving wife to spend . . . And now and then she may enjoy . . . The comforts of a friend . . . But all in all they have to make . . . A heavy sacrifice . . . And Mrs. Doctor has to pay . . . Her portion of the price.

James J. Metcalfe

Helen Hayes, in speaking for Careers in Nursing said, "If you learn to take care of others, you can always take care of yourself."

SOUTH CAROLINA ACADEMY OF GENERAL PRACTICE

Fellow General Practitioners: Approximately 130 doctors took advantage of the Post Graduate Seminar and Founders' Day program November 2, 3 and 4 this year. There were separate registrations for the two day seminar (95) and Founders' Day (84). The program was excellent and was carried through as scheduled. Many favorable comments were made by those attending. Our only regrets were that so many of our doctors were unable to attend. We should have had at least 400 present. Where were you?

The two day Seminar was put on by members of our Medical College Faculty: professors, associates, and assistants. It does one good to sit in the audience and listen to these lecturers, every one well qualified and well prepared in his particular field of medicine. We always learn a great deal by this experience and we also realize with a great deal of pride that our Medical College is right up front with the best in the country. President Lynch and Dean Cuttino deserve our praise and congratulations for keeping our school "abreast with the best".

The Founders' Day program was composed of invited guest speakers. These speakers too were well prepared and brought something of interest and practical value to the general practitioner as well as to the specialist.

Highlighting the Founders' Day program were two items of special order: one—the presentation of a portrait of Dr. William Weston of Columbia to the Medical College, the other—the presentation of a plaque of Dr. Daniel Lesesne Smith of Spartanburg to the Medical College. It was an inspiration to hear the beautiful and well deserved tributes paid these two great South Carolina pediatricians.

The Medical College luncheon was another highlight of the day. It was well attended. Here there was good food, good fellowship and greeting of old friends.

Our Medical College physical plant is expanding rapidly and keeping up with the progress of medicine. The Alumni Memorial House is ready for occupancy and was open for inspection and dedicated at this meeting. The new College Hospital is nearing completion and it is planned to have it open for inspection in May 1955 when the annual South Carolina Medical Association meeting is in session.

Fellow practitioners of medicine, it is a wonderful experience to go back to Charleston for a meeting and attending these seminars should be a "must" for all of us. You come away feeling refreshed by a few days rest from your routine work, encouraged by having absorbed some up-to-date medical knowledge and mighty proud that you are an alumnus of our grand old school.

Kirby D. Shealy, M. D., President

COLLEGE OF PHYSICIANS

At the Southeastern Regional Meeting of the American College of Physicians held October 15-16 at Gulfport, Mississippi, Dr. Robert Wilson, who is Governor of the College for South Carolina, presided as Toastmaster for the banquet.

A paper on the Prophylactic Use of Quinidine Following Myocardial Infarction by Dr. John A. Boone and Dr. Anthony Pappas was presented by Dr. Pappas.

Dr. Boone participated in a discussion on Mitral Commissurotomy.

Dr. Dale Groom, recently appoinetd Asst. Professor of Medicine, presented a paper on "The Sea Gull Murmur and Murmurs Heard at a Distance From the Chest Wall". This paper, written in collaboration with Dr. Boone, sets forth some of the research studies being carried out in the Heart Sound Laboratory at the Medical College.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

Office of the Secretary
Robert L. Faulkner ,M. D.
2105 Adelbert Road
Cleveland 6, Ohio

The next scheduled examination (Part 1), written examination and review of case histories, for all candidates will be held in various cities of the United States, Canada, and military centers outside the continental United States, on Friday, February 4, 1955.

Case Abstracts numbering 20 are to be sent by the candidate to the Secretary as soon as possible after receiving notification of eligibility to the Part I written examination.

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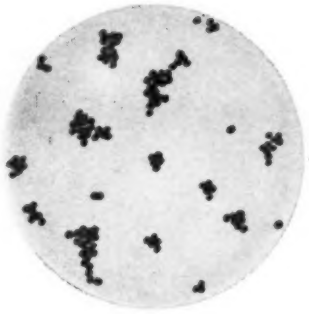

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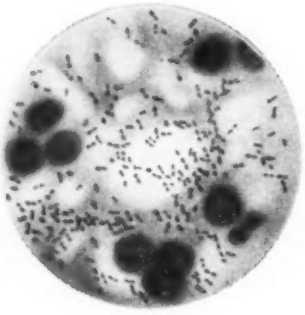

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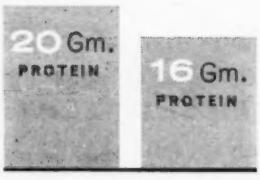

Lactum formula for a 10 lb. infant

Recommended Daily Allowance for a 10 lb. infant

1. Jeans, P. C., in A.M.A. Handbook of Nutrition, Philadelphia, Blakiston, 1951, pp. 275-298. 2. Stare, F. J., and Davidson, C. S., in The Proteins, American Medical Association, 1945.

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